



United States
Department of
Agriculture

In cooperation with
the Arkansas Agricultural
Experiment Station



NRCS

Natural
Resources
Conservation
Service

Soil Survey of Pike County, Arkansas



How To Use This Soil Survey

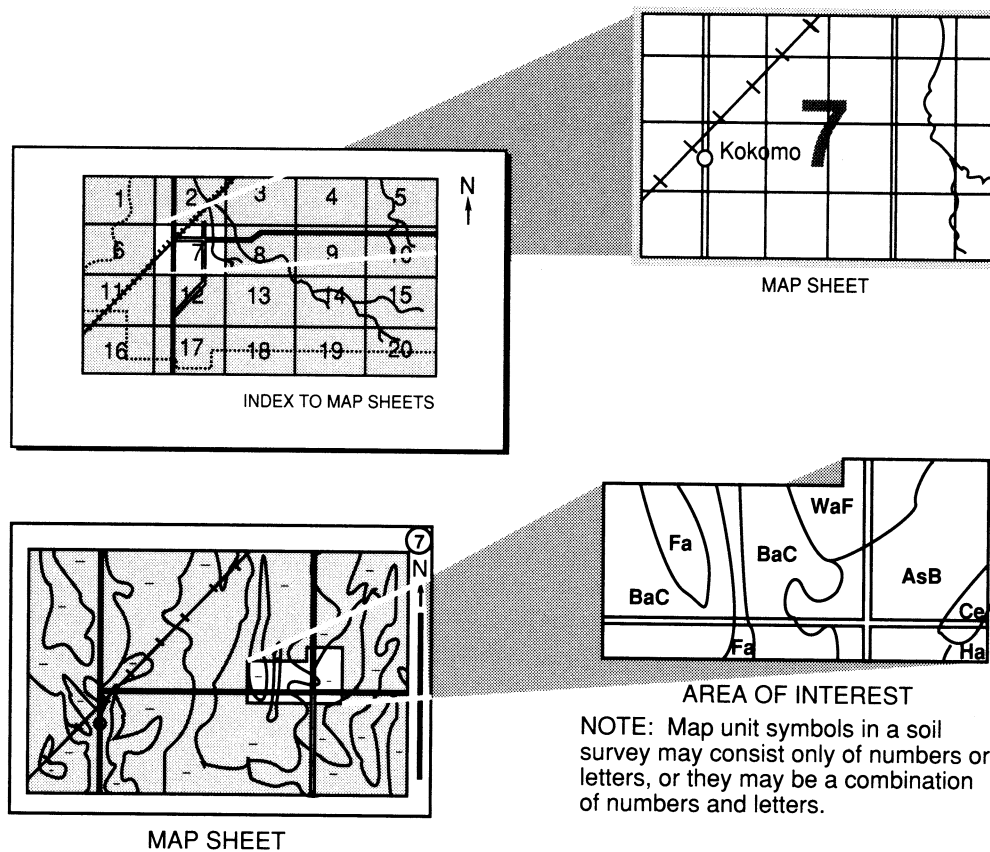
Detailed Soil Maps

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



National Cooperative Soil Survey

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service has leadership for the Federal part of the National Cooperative Soil Survey. This survey was made cooperatively by the Natural Resources Conservation Service and the Arkansas Agricultural Experiment Station. The survey is part of the technical assistance furnished to the Pike County Conservation District.

Major fieldwork for this soil survey was completed in 2007. Soil names and descriptions were approved in 2008. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2008. The most current official data are available on the Internet.

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Citation

The recommended citation for this survey is:

United States Department of Agriculture, Natural Resources Conservation Service.

2010. Soil Survey of Pike County, Arkansas. http://soils.usda.gov/survey/printed_surveys/.

Cover Caption

Steep, forested areas of Carnasaw and Sherless soils are in the foreground. Poultry houses set on Sherless and Littlefir soils are in the middle ground. Yanush and Bigfork soils are in the background in mountainous areas where shortleaf pine dominates commercial timber production. Timber and poultry production are major sources of agriculture income in Pike County.

Additional information about the Nation's natural resources is available online from the Natural Resources Conservation Service at <http://www.nrcs.usda.gov>.

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Issued September 2010

Foreword

Soil surveys contain information that affects land use planning. They include predictions of soil behavior for selected land uses. The surveys highlight soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

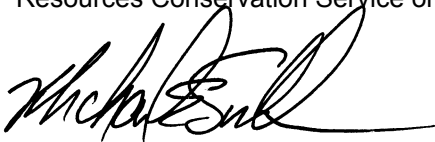
Soil surveys are designed for many different users. Farmers, ranchers, foresters, and agronomists can use the surveys to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the surveys to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the surveys to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://soils.usda.gov/sqi/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. The location of each map unit is shown on the detailed soil maps. Each soil in the survey area is described, and information on specific uses is given. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.



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Soil Survey of Pike County, Arkansas

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United States Department of Agriculture,
Natural Resources Conservation Service and Forest Service,
in cooperation with
the Arkansas Agricultural Experiment Station

PIKE COUNTY is in the southwestern part of Arkansas (fig. 1). It is roughly rectangular in shape and is about 28 miles from north to south and 27 miles from east to west. The county is bordered on the north by Montgomery County, on the east by Clark County, on the south by Hempstead and Nevada Counties, and on the west by Howard County. Pike County has a total area is 392,755 acres, or 614 square miles, which includes 9,728 acres of large bodies of water.

In 2005, the population of Pike County was 11,303. Murfreesboro, the county seat, had a population of 1,779. Glenwood had a population of 2,147.

The economy of Pike County is based on the production of livestock, poultry, and timber and on industry, tourism, and other businesses.

General Nature of the Survey Area

This section briefly describes the early history, agriculture and industry, physiography and drainage, and climate of Pike County.

Mountainous and hilly areas make up about 60 percent of the county, mostly in the northern part of the county. Elevations in these areas range from about 350 feet along the Antoine River in the eastern part of the county to about 1,800 feet at the top of Hog Pen Mountain in the northwestern part of the county. The soils in most of these areas are too steep for intensive use and are used mainly as forestland or native pasture. Some of the less sloping soils are suitable for improved pasture, and some of the soils in narrow valleys and adjacent to tributaries are suitable for truck crops.

About 40 percent of the county consists of level to moderately sloping hills, terraces, and areas of alluvial sediment. Elevations in these parts of the county range from about 220 feet in the southeastern part of the county along the Antoine River to about 700 feet on the tops of hills and terraces. The soils in these areas are used mainly for forage crops and forestland.

Early History

The first human inhabitants of the area that is now Pike County are believed to have been Paleo-Indians. They are believed to have inhabited the area as early as

Soil Survey of Pike County, Arkansas

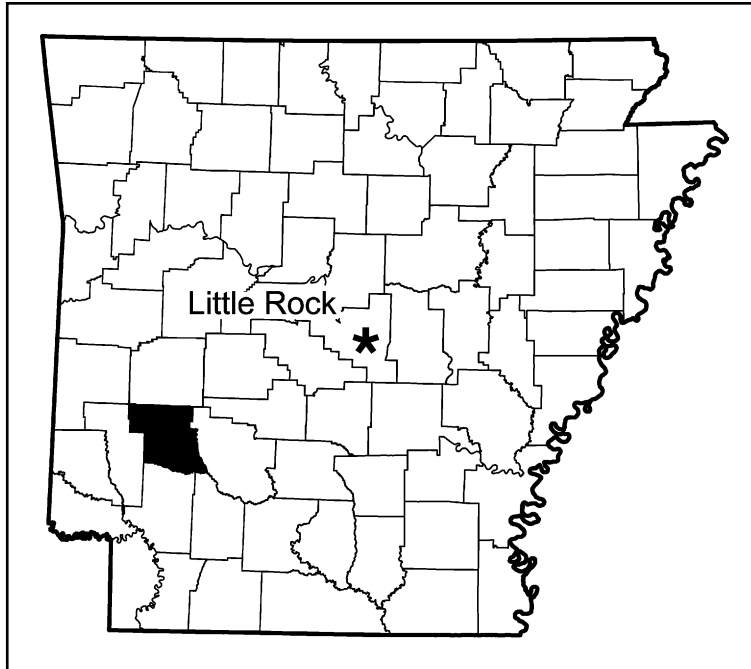


Figure 1.—Location of Pike County in Arkansas.

8000 B.C.. In the following centuries, numerous Indian cultures evolved, including that of the Tula (Caddo) Tribe. This tribe was involved in a historic battle with the Spanish explorer Hernando DeSoto near the area that is now named Caddo Gap, 7 miles northwest of Glenwood. DeSoto and his band of conquistadors were the first Europeans in the area. They wintered on the banks of the Ouachita River near the present site of Hot Springs during the winter of 1541–42. The French followed the Spanish into the area in the late 17th century. The name “Caddo” is derived from the 18th century French word “Cadodaquois” and refers to the “Great Chiefs of the Kadohodacho” tribe.

In 1803, the United States acquired the area that is now Pike County as a part of the Louisiana Territory, which was a vast, uncharted wilderness. In 1812, the area became a part of the Missouri Territory. In 1813, Arkansas County was created as a part of the Missouri Territory. On July 4, 1819, Arkansas was separated from the Missouri Territory under the name of Arkansas Territory.

Pike County was originally a part of Hempstead and Clark Counties. On November 1, 1833, Pike County was created by an act of the Arkansas Territorial Legislature. Thus, Pike County was one of the original counties when Arkansas became a state in 1836. Pike County was named in honor of Zebulon Montgomery Pike, a military officer and explorer. He was commissioned by President Thomas Jefferson to explore the northwestern portion of the Louisiana Territory, which had recently been acquired from France. He is also noted for attempting to climb the mountain in Colorado that was subsequently named Pikes Peak.

In 1834, the county seat of Pike County was located in the town of Zebulon. In 1836, the town was renamed “Murfreeshorough.” The spelling of the name was later changed to “Murfreeshoro.” On December 9, 1837, Murfreeshoro was officially made the permanent county seat. The first survey of the area was made also made in 1837. The survey was authorized by a Congressional act that also granted veterans of the War of 1812 a patent to lands previously in the Louisiana Purchase. These veterans were among the first settlers of Pike County.

During the Civil War, Pike County supplied two full companies of soldiers for the Confederacy. No documented battles were fought in Pike County.

Agriculture and Industry

When the early settlers came to Pike County, about three-fourths of the land supported native hardwood-and-pine forest. The settlers started arriving around 1815, mostly from Kentucky, Tennessee, Georgia, and other nearby states. The settlers cleared and farmed the soils that had good natural drainage, particularly the more fertile soils along the Little Missouri River, the Antoine River, and their subsidiary tributaries in the southern part of the county.

The settlers were, for the most part, initially subsistence farmers, but they eventually started to grow cotton as a cash crop. Cotton was the principal crop for many years. The average yield was 1,400 pounds per acre for bottom land soils and 800 pounds per acre for upland soils. Corn was also grown, mainly for use on the farm. The corn was ground into meal or used to feed horses, mules, and other livestock.

Most of the soils in the northern two-thirds of Pike County were gravelly or stony, hilly, and low in natural fertility. After years of intensive farming, limited nutrient replenishment, and limited erosion control, the productivity of the soils substantially decreased. By the 1930s, many farmers were forced to either abandon their farms or convert from cultivated crops to pasture, meadow, or timber. The loss of productivity revealed to the landowners the need to protect their soil and water resources. Therefore, in 1941, they formed the Little Missouri Soil and Water Conservation District, which was later renamed the Pike County Conservation District.

Since the formation of the Conservation District, changes to land use and further conservation efforts have recovered much of the lost soil productivity. Increased production of poultry and swine in the county has enhanced the productivity of these soils by improving the availability of manure.

Crop production currently occurs on only a very limited basis in Pike County. Truck crops, such as corn, cotton, wheat, oats, sweet potatoes, peanuts, cowpeas, and melons, are grown. Fruit is also produced. At one time, the community of Highland hosted the largest peach orchard in the world. Recently, agriculture has become more diversified, and cattle, timber, poultry, and hogs provide most of the farm income. In 2002, about 17 percent of Pike County was farmland (USDA–NASS, 2002). The county had a total of 393 farms, averaging about 173 acres per farm. There were 9,987 cattle and calves sold, 202,163 hogs and pigs sold, and 11,447,372 broilers and other meat-type chickens sold.

Tourism is a substantial contributor to the economy of Pike County. In 1906, John Wesley Huddleston found a 4½-carat white diamond and a 3-carat white diamond in one afternoon on his farm in Pike County. His farm was about 2½ miles southeast of Murfreesboro. This find marked the first time in history that diamonds were found in their original matrix in the Western Hemisphere. In the ensuing years, the 72½ acre diamond-bearing formation changed ownership several times and supported various mining operations and tourism businesses. In 1969, for the first time in the turbulent history of the area, all owners of mine property were in simultaneous agreement, allowing the entire crater and some adjoining land to be sold to single company. The company in turn sold the property to the State of Arkansas. Subsequently, the Crater of Diamonds State Park was created in 1972. Thousands of people each year visit this unique place and try their luck and skill at diamond mining.

In 1950, Narrows Dam was completed, creating Lake Greeson (fig. 2). The lake provides flood control for the Little Missouri River watershed and a water supply for the City of Murfreesboro. In 1954, Daisy State Park was established on the north side of the lake. The park provides additional amenities for water-sports enthusiasts, campers, and fishermen.



Figure 2.—Lake Greeson, which is in the northwestern part of Pike County. Carnasaw, Sherless, Nashoba, and Littlefir soils are the dominant soils around the lake. These soils have moderately high or high potential for timber production. Lake Greeson provides many recreational opportunities as well as a water supply for the City of Murfreesboro.

Physiography and Drainage

Pike County includes parts of two Major Land Resource Areas. The Ouachita Mountains area makes up the northern two-thirds of the county, and the Cretaceous Western Gulf Coastal Plain area makes up the remainder of the county. The Ouachita Mountains area is the older area, originating from the Devonian geologic time period. The soils in this area formed in material weathered from tilted, folded, and fractured sandstone, shale, novaculite, and chert and in local alluvial and colluvial sediment. The soils in the Cretaceous Western Coastal Plain area formed dominantly in unconsolidated alluvial sediment and in material weathered from chalk or marl.

The Ouachita Mountains area is characterized by gently sloping to very steep, upland ridgetops that are typically oriented east-west. This area has been intricately dissected by streams. Elevation ranges from about 1,800 feet above sea level in the northwestern corner of the county to about 400 feet above sea level near Shawmut in the eastern part of the county. The extreme northern edge of the county consists of a band of mountains that are underlain dominantly by novaculite, chert, and sandstone. These mountains are the steepest and most rugged terrain in the county. South of this area are the higher hills and mountains, which are typically underlain by intermingled shale and sandstone. Large sandstone fragments and rock outcroppings are common on the surface in the higher hills and mountains. The lower hills and ridges are typically underlain by intermingled sandstone and shale bedrock that is fractured and tilted at about 45 degrees. Typically, the valley floors have a mixed influence of sandstone and shale. The shale is somewhat dominant.

Yanush soils are typical of the soils that formed in colluvium from novaculite and chert. Bigfork and Avant soils are typical of the soils that formed in residuum from novaculite and chert, respectively. Clebit, Nashoba, Pirum, Sherwood, and Zafra are typical of the soils that formed in residuum from sandstone. Sherless and Littlefir soils

are typical of the soils that formed in residuum from interbedded sandstone and shale. Carnasaw and Bengal soils are typical of the soils that formed in residuum from shale.

Stream valleys in the Ouachita Mountains are entrenched and range in width from about 100 feet to more than 1,000 feet. Ceda, Cupco, Dela, Kenn, Speer, and Woodall soils are on the flood plains, and Avilla, Mena, and Wetsaw soils are on the terraces. Bonnerdale and Mazarn soils are on the lower lying landscapes within the valleys.

The Cretaceous Western Gulf Coastal Plain area is characterized by level to moderately steep uplands that formed primarily from marine sediment. Rounded and subrounded gravel are common in some areas. This area has been intricately dissected by streams. Elevation ranges from about 700 feet above sea level near Highland to about 200 feet above sea level along the Antoine River in the southeastern corner of the county. Coastal Plain remnants are sometimes found as a very thin to very thick mantle underlain by Ouachita Mountain bedrock in the transition zone between the Coastal Plain and the Ouachita Mountains. McCaskill, Nathan, Peanutrock, Pikecity, Stelltown, and Tiak soils are typical of the soils that formed on the Coastal Plain uplands.

Stream valleys in the Coastal Plain are somewhat entrenched and range in width from several hundred feet to as much as several miles. Gurdon, Guyton, Ochlockonee, Ouachita, Ozan, Pikecreek, Sardis, Toine, and Vaughn soils are typical of the soils of the Coastal Plain bottom lands.

An area with some unique geology and soils is in the southeastern part of the county between the communities of Pisgah and Delight. The relatively small area was formerly considered a portion of the Alabama, Mississippi, and Arkansas Blackland Prairie but is now a part of the Cretaceous Western Gulf Coastal Plain. The area is characterized by nearly level to moderately steep, eroded to severely eroded uplands. Most of the area is underlain by marl or chalk bedrock. Vegetation is predominantly prairie grasses with some scattered hardwoods and pines. Delight and Billstown soils are typical of the soils on uplands in the area. Stream valleys in the area are somewhat entrenched. Leeper and Marietta soils are typical of the soils on bottom lands in the area.

Drainage is generally toward the south and east in Pike County. Three major rivers flow through the county. The Caddo River flows in a southeasterly direction through the northeastern corner of the county and passes through the city of Glenwood. The Little Missouri River flows from the Montgomery County line across the entire length of Pike County to the southeast corner of the county. The Little Missouri River, Lake Greeson, and numerous intermittent and perennial streams drain most of western Pike County. Lake Greeson is a large lake constructed on the Little Missouri River. Muddy Fork Creek, which empties into the Little Missouri River, drains a good portion of southwestern Pike County. The Antoine River flows in a more southerly direction nearly the entire length of the county. The Antoine River, along with numerous intermittent and perennial streams, drains most of the east-central portion of Pike County and forms a border with Clark County to the east.

Domestic water sources are the Caddo River, Lake Greeson, drilled and dug wells, and springs. Springs are common in many areas, and they contribute substantially to streamflow in the summer and fall. Farm ponds and creeks are used to water livestock.

Climate

Table 1 gives data on temperature and precipitation for the survey area as recorded at Murfreesboro, Arkansas, in the period 1970 to 1995. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on length of the growing season.

In winter, the average temperature is 41.7 degrees F and the average daily minimum temperature is 29.9 degrees. The lowest temperature on record, which occurred on December 23, 1989, is -2 degrees. In summer, the average temperature

is 77.9 degrees and the average daily maximum temperature is 89.8 degrees. The highest recorded temperature, which occurred on August 18, 1980, is 108 degrees.

Growing degree days are shown in the table 1. They are equivalent to "heat units." During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The total annual precipitation is about 56.93 inches. Of this, 32.73 inches, or 57 percent, usually falls in April through October. The growing season for most crops falls within this period. In 2 years out of 10, the rainfall in April through September is less than 2.20 inches. The heaviest 1-day rainfall during the period of record was 8.74 inches on July 2, 1983. Thunderstorms occur on about 57 days each year and are most common in July.

The average seasonal snowfall is about 2.6 inches. The greatest snow depth at any one time during the period of record was 7 inches recorded on February 2, 1985. On average, 0 days of the year have at least 1 inch of snow on the ground. The number of such days varies greatly from year to year. The heaviest 1-day snowfall on record was more than 8 inches recorded on December 16, 1983.

The average relative humidity in mid-afternoon is about 57 percent. Humidity is higher at night, and the average at dawn is about 84 percent. The sun shines 72 percent of the time possible in summer and 49 percent in winter. The prevailing wind is from the southwest. Average windspeed is highest, 9.7 miles per hour, in March.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic

classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Detailed Soil Map Units

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, and other characteristics that affect their use. On the basis of such differences, a soil series is

divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Avilla fine sandy loam, 1 to 6 percent slopes, is a phase of the Avilla series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes.

A *complex* consists of two or more soils in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Bigfork-Rock outcrop complex, 3 to 15 percent slopes, very rubbly, is an example.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Water is an example.

Table 4 lists the map units in this survey area. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

1—Antoine loam, 1 to 6 percent slopes

Map Unit Composition

Major components

Antoine and similar soils: 85 to 95 percent

Contrasting inclusions

Tiak soils: 0 to 15 percent

Characteristics of the Antoine Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Loamy marine deposits

Slope: 1 to 6 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: High (about 10.4 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 18 to 30 inches (perched)

Runoff class: Medium

Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown loam; very strongly acid

Subsoil:

3 to 9 inches—yellowish brown silt loam; very strongly acid

9 to 23 inches—brownish yellow loam; very strongly acid

23 to 35 inches—yellowish red and light brownish gray loam; very strongly acid

35 to 47 inches—yellowish red and light brownish gray silt loam; very strongly acid

47 to 80 inches—light brownish gray clay loam; strongly acid

2—Avilla fine sandy loam, 1 to 6 percent slopes

Map Unit Composition

Major components

Avilla and similar soils: 80 to 90 percent

Contrasting inclusions

Wetsaw soils: 0 to 10 percent

Characteristics of the Avilla Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Treads on stream terraces

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Loamy alluvium derived from sandstone and shale

Slope: 1 to 6 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 8.4 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 4 inches—brown fine sandy loam; moderately acid

Subsoil:

4 to 9 inches—strong brown loam; moderately acid

9 to 16 inches—yellowish red loam; strongly acid

16 to 34 inches—yellowish red clay loam; strongly acid

34 to 44 inches—yellowish red gravelly clay loam; strongly acid

44 to 61 inches—light brownish gray and yellowish brown gravelly clay loam; very strongly acid

3—Avilla gravelly fine sandy loam, 1 to 6 percent slopes

Map Unit Composition

Major components

Avilla and similar soils: 80 to 90 percent

Contrasting inclusions

Wetsaw soils: 0 to 10 percent

Characteristics of the Avilla Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Treads on stream terraces

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Loamy alluvium derived from sandstone and shale

Slope: 1 to 6 percent (southeast aspect)

Soil Survey of Pike County, Arkansas

Surface fragments: None
Restrictive features: None
Drainage class: Well drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: Moderate (about 8.4 inches)
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: Low
Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 4 inches—brown gravelly fine sandy loam; moderately acid

Subsoil:

4 to 9 inches—strong brown loam; moderately acid

9 to 16 inches—yellowish red loam; strongly acid

16 to 34 inches—yellowish red clay loam; strongly acid

34 to 44 inches—yellowish red gravelly clay loam; strongly acid

44 to 61 inches—light brownish gray and yellowish brown gravelly clay loam; very strongly acid

4—Avilla gravelly fine sandy loam, 6 to 12 percent slopes

Map Unit Composition

Major components

Avilla and similar soils: 90 to 100 percent

Contrasting inclusions

Wetsaw soils: 0 to 5 percent

Mena soils: 0 to 5 percent

Characteristics of the Avilla Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Risers on stream terraces

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Loamy alluvium derived from sandstone and shale

Slope: 6 to 12 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 8.4 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 4 inches—brown gravelly fine sandy loam; moderately acid

Subsoil:

- 4 to 9 inches—strong brown loam; moderately acid
- 9 to 16 inches—yellowish red loam; strongly acid
- 16 to 34 inches—yellowish red clay loam; strongly acid
- 34 to 44 inches—yellowish red gravelly clay loam; strongly acid
- 44 to 61 inches—light brownish gray and yellowish brown gravelly clay loam; very strongly acid

5—Bengal-Bismarck-Yanush complex, 8 to 15 percent slopes

Map Unit Composition

Major components

- Bengal and similar soils: 50 percent
- Bismarck and similar soils: 20 percent
- Yanush and similar soils: 20 percent

Contrasting inclusions

- Carnasaw soils: 0 to 10 percent

Characteristics of the Bengal Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Loamy colluvium over clayey residuum that weathered from acid shale

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: About 3 to 15 percent (subangular)

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Low (about 5.7 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

- 0 to 3 inches—dark grayish brown cobbly silt loam; strongly acid

Subsurface layer:

- 3 to 6 inches—yellowish brown silt loam; strongly acid

Subsoil:

- 6 to 13 inches—strong brown silty clay loam; very strongly acid
- 13 to 31 inches—yellowish red silty clay; very strongly acid
- 31 to 37 inches—yellowish red channery silty clay; very strongly acid

Substratum:

- 37 to 40 inches—red and gray, soft, acid shale that is tilted and fractured

Characteristics of the Bismarck Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Soil Survey of Pike County, Arkansas

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Gravelly residuum that weathered from acid shale

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: About 3 to 15 percent (subangular)

Restrictive features: Bedrock at a depth of 10 to 20 inches (paralithic)

Drainage class: Somewhat excessively drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Very low (about 2.1 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 6 inches—brown cobbly silt loam; strongly acid

Subsoil:

6 to 10 inches—yellowish brown extremely channery silt loam; very strongly acid

10 to 16 inches—yellowish brown extremely channery silt loam; very strongly acid

Substratum:

16 to 20 inches—gray, tilted, weakly cemented, soft, acid shale that is fractured and contains thin seams of soil material

Characteristics of the Yanush Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Gravelly colluvium derived from novaculite

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: About 3 to 15 percent (angular)

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 6.4 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 5 inches—brown very cobbly silt loam; strongly acid

Subsurface layer:

5 to 12 inches—yellowish brown very gravelly silt loam; strongly acid

Subsoil:

12 to 19 inches—strong brown very gravelly silt loam; strongly acid

19 to 33 inches—yellowish red very gravelly silty clay loam; very strongly acid

33 to 80 inches—red very gravelly silty clay loam; very strongly acid

6—Bengal-Bismarck-Yanush complex, 15 to 35 percent slopes, extremely stony

Map Unit Composition

Major components

Bengal and similar soils: 50 percent
Bismarck and similar soils: 20 percent
Yanush and similar soils: 20 percent

Contrasting inclusions

Carnasaw soils: 0 to 10 percent

Characteristics of the Bengal Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Loamy colluvium over clayey residuum that weathered from acid shale

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: About 3 to 15 percent (subangular)

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Low (about 5.7 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown cobbly silt loam; strongly acid

Subsurface layer:

3 to 6 inches—yellowish brown silt loam; strongly acid

Subsoil:

6 to 13 inches—strong brown silty clay loam; very strongly acid

13 to 31 inches—yellowish red silty clay; very strongly acid

31 to 37 inches—yellowish red channery silty clay; very strongly acid

Substratum:

37 to 40 inches—red and gray, soft, acid shale that is tilted and fractured

Characteristics of the Bismarck Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Gravelly residuum that weathered from acid shale

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: About 3 to 15 percent (subangular)

Restrictive features: Bedrock at a depth of 10 to 20 inches (paralithic)

Drainage class: Somewhat excessively drained

Soil Survey of Pike County, Arkansas

Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: Very low (about 2.1 inches)
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: High
Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 6 inches—brown cobbly silt loam; strongly acid

Subsoil:

6 to 10 inches—yellowish brown extremely channery silt loam; very strongly acid

10 to 16 inches—yellowish brown extremely channery silt loam; very strongly acid

Substratum:

16 to 20 inches—gray, tilted, weakly cemented, soft, acid shale that is fractured and contains thin seams of soil material

Characteristics of the Yanush Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Gravelly colluvium derived from novaculite

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: About 3 to 15 percent (angular)

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 6.4 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 5 inches—brown cobbly silt loam; strongly acid

Subsurface layer:

5 to 12 inches—yellowish brown very gravelly silt loam; strongly acid

Subsoil:

12 to 19 inches—strong brown very gravelly silt loam; strongly acid

19 to 33 inches—yellowish red very gravelly silty clay loam; very strongly acid

33 to 80 inches—red very gravelly silty clay loam; very strongly acid

7—Bengal-Bismarck-Bigfork complex, 35 to 60 percent slopes, extremely stony

Map Unit Composition

Major components

Bengal and similar soils: 50 percent

Soil Survey of Pike County, Arkansas

Bismarck and similar soils: 25 percent

Bigfork and similar soils: 20 percent

Contrasting inclusions

Avant soils: 0 to 5 percent

Carnasaw soils: 0 to 5 percent

Yanush soils: 0 to 5 percent

Characteristics of the Bengal Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Loamy colluvium over clayey residuum that weathered from acid shale

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: About 3 to 15 percent (subangular)

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Low (about 5.8 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown cobbly silt loam; strongly acid

Subsurface layer:

3 to 6 inches—yellowish brown silt loam; strongly acid

Subsoil:

6 to 13 inches—strong brown silty clay loam; very strongly acid

13 to 31 inches—yellowish red silty clay; very strongly acid

31 to 37 inches—yellowish red channery silty clay; very strongly acid

Substratum:

37 to 40 inches—red and gray, soft, acid shale that is tilted and fractured

Characteristics of the Bismarck Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Gravelly residuum that weathered from acid shale

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: About 3 to 15 percent (subangular)

Restrictive features: Bedrock at a depth of 10 to 20 inches (paralithic)

Drainage class: Somewhat excessively drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Very low (about 2.1 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Soil Survey of Pike County, Arkansas

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 6 inches—brown gravelly silt loam; strongly acid

Subsoil:

6 to 10 inches—yellowish brown extremely channery silt loam; very strongly acid

10 to 16 inches—yellowish brown extremely channery silt loam; very strongly acid

Substratum:

16 to 20 inches—gray, tilted, weakly cemented, soft, acid shale that is fractured and contains thin seams of soil material

Characteristics of the Bigfork Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Gravelly residuum that weathered from novaculite

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: About 15 to 40 percent (angular)

Restrictive features: Bedrock at a depth of 20 to 40 inches (lithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Very low (about 2.3 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 3 inches—brown extremely stony loam; strongly acid

Subsurface layer:

3 to 7 inches—yellowish brown very cobbly loam; strongly acid

Subsoil:

7 to 25 inches—strong brown very cobbly silty clay loam; very strongly acid

Bedrock:

25 to 40 inches—hard novaculite bedrock that is tilted and fractured

8—Bigfork-Rock outcrop complex, 3 to 15 percent slopes, very rubbly

Map Unit Composition

Major components

Bigfork and similar soils: 60 to 70 percent

Rock outcrop and similar areas: 15 to 30 percent

Contrasting inclusions

Bengal soils: 0 to 10 percent

Characteristics of the Bigfork Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and convex across the slope

Parent material: Gravelly residuum that weathered from novaculite

Slope: 3 to 15 percent (southeast aspect)

Surface fragments: About 50 to 80 percent (angular)

Restrictive features: Bedrock at a depth of 20 to 50 inches (lithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Very low (about 2.3 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 3 inches—brown extremely stony loam; strongly acid

Subsurface layer:

3 to 7 inches—yellowish brown very cobbly loam; strongly acid

Subsoil:

7 to 25 inches—strong brown very cobbly silty clay loam; very strongly acid

Bedrock:

25 to 40 inches—hard novaculite bedrock that is tilted and fractured

Characteristics of the Rock Outcrop

The rock outcrop consists of large, massive exposures of novaculite bedrock. It occurs throughout the map unit, dominantly on the upper sides slopes.

9—Bigfork-Yanush-Rock outcrop complex, 35 to 60 percent slopes, rubbly

Map Unit Composition

Major components

Bigfork and similar soils: 35 to 50 percent

Yanush and similar soils: 25 to 35 percent

Rock outcrop and similar areas: 10 to 20 percent

Contrasting inclusions

Bengal soils: 5 to 15 percent

Characteristics of the Bigfork Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and convex across the slope

Hillslope position: Backslopes

Parent material: Gravelly residuum that weathered from novaculite

Slope: 35 to 60 percent (southeast aspect)

Soil Survey of Pike County, Arkansas

Surface fragments: About 50 to 80 percent (angular)
Restrictive features: Bedrock at a depth of 20 to 40 inches (lithic)
Drainage class: Well drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: Very low (about 2.3 inches)
Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: High
Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 3 inches—brown very stony loam; strongly acid

Subsurface layer:

3 to 7 inches—yellowish brown very cobbly loam; strongly acid

Subsoil:

7 to 25 inches—strong brown very cobbly silty clay loam; very strongly acid

Bedrock:

25 to 40 inches—hard novaculite bedrock that is tilted and fractured

Characteristics of the Yanush Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly colluvium derived from novaculite

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: About 50 to 80 percent (angular)

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 6.4 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 5 inches—brown very stony loam; strongly acid

Subsurface layer:

5 to 12 inches—yellowish brown very gravelly silt loam; strongly acid

Subsoil:

12 to 19 inches—strong brown very gravelly silt loam; strongly acid

19 to 33 inches—yellowish red very gravelly silty clay loam; very strongly acid

33 to 80 inches—red very gravelly silty clay loam; very strongly acid

Characteristics of the Rock Outcrop

The rock outcrop consists of large, massive exposures of novaculite bedrock. It occurs throughout the map unit, dominantly on the upper sides slopes.

10—Billstown loam, 3 to 8 percent slopes

Map Unit Composition

Major components

Billstown and similar soils: 75 to 85 percent

Contrasting inclusions

Tiak soils: 0 to 10 percent

Japany soils: 0 to 10 percent

Characteristics of the Billstown Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Clayey marl and/or marine deposits

Slope: 3 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Very slow or impermeable (about 0.00 micrometers/sec)

Available water capacity: High (about 10.8 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 7 inches—dark grayish brown loam; moderately acid

Subsurface layer:

7 to 13 inches—yellowish brown gravelly silt loam; very strongly acid

Subsoil:

13 to 22 inches—red clay; very strongly acid

22 to 32 inches—red clay; very strongly acid

32 to 49 inches—gray clay; very strongly acid

49 to 64 inches—light olive brown clay; moderately alkaline

64 to 79 inches—olive yellow silty clay; moderately alkaline

11—Billstown loam, 8 to 15 percent slopes

Map Unit Composition

Major components

Billstown and similar soils: 85 to 90 percent

Contrasting inclusions

Tiak soils: 0 to 10 percent

Japany soils: 0 to 10 percent

Characteristics of the Billstown Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Soil Survey of Pike County, Arkansas

Parent material: Clayey marl and/or marine deposits
Slope: 8 to 15 percent (southeast aspect)
Surface fragments: None
Restrictive features: None
Drainage class: Moderately well drained
Permeability: Very slow or impermeable (about 0.00 micrometers/sec)
Available water capacity: High (about 10.8 inches)
Shrink-swell potential: High (about 7.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: Very high
Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 7 inches—dark grayish brown loam; moderately acid

Subsurface layer:

7 to 13 inches—yellowish brown gravelly silt loam; very strongly acid

Subsoil:

13 to 22 inches—red clay; very strongly acid

22 to 32 inches—red clay; very strongly acid

32 to 49 inches—gray clay; very strongly acid

49 to 64 inches—light olive brown clay; moderately alkaline

64 to 79 inches—olive yellow silty clay; moderately alkaline

12—Billstown-Tiak complex, 8 to 15 percent slopes

Map Unit Composition

Major components

Billstown and similar soils: 40 to 60 percent

Tiak and similar soils: 30 to 50 percent

Contrasting inclusions

Delight soils: 5 to 10 percent

Characteristics of the Billstown Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Clayey marl and/or marine deposits

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Very slow or impermeable (about 0.00 micrometers/sec)

Available water capacity: High (about 10.8 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 7 inches—dark grayish brown silt loam; moderately acid

Subsurface layer:

7 to 13 inches—yellowish brown gravelly silt loam; very strongly acid

Subsoil:

13 to 22 inches—red clay; very strongly acid

22 to 32 inches—red clay; very strongly acid

32 to 49 inches—gray clay; very strongly acid

49 to 64 inches—light olive brown clay; moderately alkaline

64 to 79 inches—olive yellow silty clay; moderately alkaline

Characteristics of the Tiak Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Upland clayey marine deposits

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: High (about 9.8 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 24 to 48 inches (apparent)

Runoff class: High

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 6 inches—yellowish brown very fine sandy loam; strongly acid

Subsoil:

6 to 19 inches—yellowish red silty clay; very strongly acid

19 to 27 inches—yellowish red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

27 to 40 inches—red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

40 to 72 inches—red clay that has yellowish brown masses of oxidized iron and gray iron depletions; very strongly acid

13—Bonnerdale fine sandy loam, 3 to 8 percent slopes

Map Unit Composition

Major components

Bonnerdale and similar soils: 85 to 95 percent

Contrasting inclusions

Littlefir soils: 0 to 5 percent

Mazarn soils: 5 to 10 percent

Nashoba soils: 0 to 5 percent

Sherless soils: 0 to 5 percent

Characteristics of the Bonnerdale Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Concave upland slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Side slopes (fig. 3)

Parent material: Loamy residuum that weathered from sandstone

Slope: 3 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 40 to 60 inches (paralithic)

Drainage class: Somewhat poorly drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 7.7 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 6 to 12 inches (perched)

Runoff class: Low

Land capability classification, nonirrigated: 2e

Typical profile

Surface layer:

0 to 3 inches—dark yellowish brown fine sandy loam; slightly acid

Subsoil:

3 to 13 inches—yellowish brown and light brownish gray fine sandy loam that has strong brown masses of oxidized iron; moderately acid

13 to 24 inches—strong brown and grayish brown fine sandy loam; strongly acid

24 to 35 inches—light brownish gray, brownish yellow, and strong brown fine sandy loam; strongly acid



Figure 3.—An area of Bonnerdale fine sandy loam, 3 to 8 percent slopes. This soil is well suited to pasture and hayland. The application of poultry litter has greatly enhanced soil productivity in Pike County and throughout western Arkansas.

35 to 43 inches—light brownish gray and strong brown fine sandy loam that has red masses of oxidized iron; very strongly acid

43 to 54 inches—pinkish gray and strong brown fine sandy loam; very strongly acid

Substratum:

54 to 60 inches—soft, partially weathered sandstone that is fractured and tilted

14—Carnasaw-Pirum complex, 3 to 15 percent slopes, rubbly

Map Unit Composition

Major components

Carnasaw and similar soils: 70 percent

Pirum and similar soils: 20 percent

Contrasting inclusions

Clebit soils: 10 percent

Characteristics of the Carnasaw Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Ridges and shoulders (fig. 4)

Shape of the slope: Convex down the slope and convex across the slope

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 3 to 15 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Restrictive features: Bedrock at a depth of 40 to 60 inches (paralithic)

Drainage class: Well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Moderate (about 7.1 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 6s

Typical profile

Surface layer:

0 to 3 inches—brown cobbly fine sandy loam; strongly acid

Subsurface layer:

3 to 10 inches—yellowish brown cobbly fine sandy loam; very strongly acid

Subsoil:

10 to 40 inches—strong brown silty clay that has yellowish brown iron depletions; very strongly acid

40 to 58 inches—red and light yellowish brown silty clay that has light brownish gray iron depletions; very strongly acid

Substratum:

58 to 60 inches—fractured and tilted shale and interbedded sandstone and shale in shades of red, brown, yellow, and gray

Characteristics of the Pirum Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Ridges and shoulders



Figure 4.—An area of Carnasaw-Pirum complex, 3 to 15 percent slopes, rubbly. This map unit is primarily on mountaintops and is moderately suited to timber production.

Parent material: Loamy residuum that weathered from sandstone

Slope: 3 to 15 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Soil Survey of Pike County, Arkansas

Restrictive features: Bedrock at a depth of 20 to 50 inches (lithic)
Drainage class: Well drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: Low (about 5.5 inches)
Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: Medium
Land capability classification, nonirrigated: 6s

Typical profile

Surface layer:

0 to 4 inches—brown stony loam; strongly acid

Subsurface layer:

4 to 8 inches—yellowish brown gravelly fine sandy loam; strongly acid

Subsoil:

8 to 26 inches—yellowish brown clay loam; very strongly acid

26 to 38 inches—yellowish brown gravelly clay loam; very strongly acid

Bedrock:

38 to 50 inches—unweathered bedrock

15—Carnasaw-Sherless complex, 8 to 15 percent slopes

Map Unit Composition

Major components

Carnasaw and similar soils: 45 to 60 percent

Sherless and similar soils: 30 to 40 percent

Contrasting inclusions

Bengal soils: 0 to 5 percent

Littlefir soils: 0 to 10 percent

Sherwood soils: 0 to 5 percent

Zafra soils: 0 to 5 percent

Characteristics of the Carnasaw Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 40 to 60 inches (paralithic)

Drainage class: Well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Moderate (about 7.1 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 3 inches—brown cobbly fine sandy loam; strongly acid

Subsurface layer:

3 to 10 inches—yellowish brown cobbly fine sandy loam; very strongly acid

Subsoil:

10 to 40 inches—strong brown silty clay that has yellowish brown iron depletions; very strongly acid

40 to 58 inches—red and light yellowish brown silty clay that has light brownish gray iron depletions; very strongly acid

Substratum:

58 to 60 inches—fractured and tilted shale and interbedded sandstone and shale in shades of red, brown, yellow, and gray

Characteristics of the Sherless Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Loamy residuum that weathered from sandstone and shale

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.6 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 5 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

5 to 8 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

8 to 17 inches—strong brown fine sandy loam; strongly acid

17 to 27 inches—yellowish red clay loam; very strongly acid

27 to 39 inches—yellowish red, red, and brownish yellow very gravelly sandy clay loam; very strongly acid

Substratum:

39 to 45 inches—fractured and tilted, soft interbedded sandstone and shale in shades of red, brown, yellow, and gray

16—Carnasaw-Sherless complex, 15 to 35 percent slopes, extremely stony

Map Unit Composition

Major components

Carnasaw and similar soils: 50 to 60 percent

Sherless and similar soils: 20 to 35 percent

Contrasting inclusions

Clebit soils: 5 percent

Characteristics of the Carnasaw Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: About 3 to 15 percent (subangular)

Restrictive features: Bedrock at a depth of 40 to 60 inches (paralithic)

Drainage class: Well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Moderate (about 7.1 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 3 inches—brown cobbly fine sandy loam

Subsurface layer:

3 to 10 inches—yellowish brown fine sandy loam

Subsoil:

10 to 40 inches—yellowish red silty clay

40 to 58 inches—red and light yellowish brown silty clay that has light brownish gray iron depletions

Characteristics of the Sherless Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Loamy residuum that weathered from sandstone and shale

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: About 3 to 15 percent (subangular)

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.6 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 5 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

5 to 8 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

8 to 17 inches—strong brown fine sandy loam; strongly acid

17 to 27 inches—yellowish red clay loam; very strongly acid

27 to 39 inches—yellowish red, red, and brownish yellow very gravelly sandy clay loam; very strongly acid

Substratum:

39 to 45 inches—fractured and tilted, soft interbedded sandstone and shale in shades of red, brown, yellow, and gray

17—Carnasaw-Sherwood-Zafra complex, 35 to 60 percent slopes, extremely stony

Map Unit Composition

Major components

Carnasaw and similar soils: 40 to 55 percent

Sherwood and similar soils: 15 to 25 percent

Zaфра and similar soils: 15 to 25 percent

Contrasting inclusions

Clebit soils: 5 to 15 percent

Characteristics of the Carnasaw Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: About 3 to 15 percent (subangular)

Restrictive features: Bedrock at a depth of 40 to 60 inches (paralithic)

Drainage class: Well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Moderate (about 7.1 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 3 inches—brown cobbly fine sandy loam; strongly acid

Subsurface layer:

3 to 10 inches—yellowish brown cobbly fine sandy loam; very strongly acid

Subsoil:

10 to 40 inches—strong brown silty clay that has yellowish brown iron depletions; very strongly acid

40 to 58 inches—red and light yellowish brown silty clay that has light brownish gray iron depletions; very strongly acid

Substratum:

58 to 60 inches—fractured and tilted shale and interbedded sandstone and shale in shades of red, brown, yellow, and gray

Characteristics of the Sherwood Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Loamy residuum that weathered from sandstone

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: About 3 to 15 percent (subangular)

Restrictive features: Bedrock at a depth of 30 to 60 inches, paralithic and lithic

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 6.4 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 5 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

5 to 13 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

13 to 34 inches—yellowish red sandy clay loam; strongly acid

34 to 42 inches—yellowish red sandy clay loam; very strongly acid

42 to 45 inches—yellowish red gravelly loam; very strongly acid

Substratum:

45 to 52 inches—soft sandstone and shale that are tilted more than 20 degrees from horizontal; abrupt irregular boundary

Bedrock:

52 to 82 inches—hard sandstone interbedded with shale

Characteristics of the Zafra Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly residuum that weathered from sandstone

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 3.4 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 2 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

2 to 5 inches—yellowish brown gravelly fine sandy loam; strongly acid

Subsoil:

5 to 9 inches—yellowish brown gravelly fine sandy loam; very strongly acid

9 to 14 inches—strong brown very gravelly loam; very strongly acid

14 to 26 inches—yellowish red very gravelly clay loam; very strongly acid

26 to 38 inches—strong brown very gravelly clay loam

Substratum:

38 to 42 inches—red, brown, and gray, soft, acid sandstone that is fractured and tilted

18—Carnasaw-Zafra-Clebit complex, 15 to 35 percent slopes, rubbly

Map Unit Composition

Major components

Carnasaw and similar soils: 40 to 60 percent

Zafra and similar soils: 20 to 40 percent

Clebit and similar soils: 10 to 20 percent

Contrasting inclusions

Rock outcrop: 5 to 10 percent

Characteristics of the Carnasaw Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Restrictive features: Bedrock at a depth of 40 to 60 inches (paralithic)

Drainage class: Well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Moderate (about 7.1 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 3 inches—brown stony fine sandy loam; strongly acid

Subsurface layer:

3 to 10 inches—yellowish brown cobbly fine sandy loam; very strongly acid

Subsoil:

10 to 40 inches—strong brown silty clay that has yellowish brown iron depletions; very strongly acid

40 to 58 inches—red and light yellowish brown silty clay that has light brownish gray iron depletions; very strongly acid

Substratum:

58 to 60 inches—fractured and tilted shale and interbedded sandstone and shale in shades of red, brown, yellow, and gray

Characteristics of the Zafra Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly residuum that weathered from sandstone

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Restrictive features: Bedrock at a depth of 20 to 60 inches (paralithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 4.1 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 2 inches—dark grayish brown stony fine sandy loam; strongly acid

Subsurface layer:

2 to 5 inches—yellowish brown gravelly fine sandy loam; strongly acid

Subsoil:

5 to 9 inches—yellowish brown gravelly fine sandy loam; very strongly acid

9 to 14 inches—strong brown very gravelly loam; very strongly acid

14 to 26 inches—yellowish red very gravelly clay loam; very strongly acid

26 to 38 inches—strong brown very gravelly clay loam; very strongly acid

Substratum:

38 to 42 inches—red, brown, and gray, soft, acid sandstone that is fractured and tilted

Characteristics of the Clebit Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly residuum that weathered from sandstone

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Restrictive features: Bedrock at a depth of 10 to 20 inches (lithic)

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Soil Survey of Pike County, Arkansas

Available water capacity: Very low (about 1.1 inches)
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: Medium
Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 4 inches—dark brown very stony fine sandy loam; strongly acid

Subsoil:

4 to 9 inches—dark yellowish brown very cobbly fine sandy loam; strongly acid

9 to 19 inches—brown very gravelly loam; very strongly acid

Bedrock:

19 to 40 inches—unweathered bedrock

19—Ceda very cobbly fine sandy loam, 0 to 3 percent slopes, frequently flooded

Map Unit Composition

Major components

Ceda and similar soils: 90 percent

Contrasting inclusions

Woodall soils: 5 percent

Kenn soils: 5 percent

Characteristics of the Ceda Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Gravelly alluvium

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Rapid (about 42.34 micrometers/sec)

Available water capacity: Low (about 5.4 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Frequent

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Negligible

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 12 inches—brown very cobbly fine sandy loam; strongly acid

Substratum:

12 to 22 inches—dark yellowish brown very cobbly fine sandy loam; moderately acid

22 to 55 inches—dark yellowish brown extremely gravelly fine sandy loam; moderately acid

55 to 80 inches—dark yellowish brown extremely cobbly fine sandy loam;
moderately acid

**20—Ceda very gravelly loam, 0 to 3 percent slopes,
frequently flooded**

Map Unit Composition

Major components

Ceda and similar soils: 95 to 100 percent

Contrasting inclusions

Kenn soils: 0 to 5 percent

Yanush soils: 0 to 5 percent

Riverwash: 0 to 5 percent

Characteristics of the Ceda Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Gravelly alluvium derived from novaculite and chert

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Rapid (about 42.34 micrometers/sec)

Available water capacity: Low (about 5.4 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Frequent

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Negligible

Land capability classification, nonirrigated: 5w

Typical profile

Surface layer:

0 to 12 inches—brown very gravelly loam; strongly acid

Substratum:

12 to 22 inches—dark yellowish brown very cobbly fine sandy loam; moderately
acid

22 to 55 inches—dark yellowish brown extremely gravelly fine sandy loam;
moderately acid

55 to 80 inches—dark yellowish brown extremely cobbly fine sandy loam;
moderately acid

**21—Clebit-Carnasaw-Pirum complex, 3 to 15 percent
slopes, rubbly**

Map Unit Composition

Major components

Clebit and similar soils: 35 to 50 percent

Carnasaw and similar soils: 25 to 40 percent

Pirum and similar soils: 10 to 20 percent

Contrasting inclusions

Rock outcrop: 0 to 15 percent

Characteristics of the Clebit Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Ridges and shoulders

Shape of the slope: Convex down the slope and convex across the slope

Parent material: Gravelly residuum that weathered from sandstone

Slope: 3 to 15 percent (southeast aspect)

Surface fragments: About 50 to 90 percent (angular)

Restrictive features: Bedrock at a depth of 10 to 20 inches (lithic)

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Very low (about 1.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 4 inches—dark brown extremely stony fine sandy loam; strongly acid

Subsoil:

4 to 9 inches—dark yellowish brown very cobbly fine sandy loam; strongly acid

9 to 19 inches—brown very gravelly loam; very strongly acid

Bedrock:

19 to 40 inches—unweathered bedrock

Characteristics of the Carnasaw Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Ridges and shoulders

Shape of the slope: Convex down the slope and convex across the slope

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 3 to 15 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Restrictive features: Bedrock at a depth of 40 to 60 inches (paralithic)

Drainage class: Well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Moderate (about 7.0 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 6s

Typical profile

Surface layer:

0 to 3 inches—brown very stony fine sandy loam; strongly acid

Subsurface layer:

3 to 10 inches—yellowish brown cobbly fine sandy loam; very strongly acid

Subsoil:

10 to 40 inches—strong brown silty clay that has yellowish brown iron depletions; very strongly acid

40 to 58 inches—red and light yellowish brown silty clay that has light brownish gray iron depletions; very strongly acid

Substratum:

58 to 60 inches—fractured and tilted shale and interbedded sandstone and shale in shades of red, brown, yellow, and gray

Characteristics of the Pirum Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Ridges and shoulders

Shape of the slope: Convex down the slope and convex across the slope

Parent material: Loamy residuum that weathered from sandstone

Slope: 3 to 15 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Restrictive features: Bedrock at a depth of 20 to 50 inches (lithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.5 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 4 inches—brown stony loam; strongly acid

Subsurface layer:

4 to 8 inches—yellowish brown gravelly fine sandy loam; strongly acid

Subsoil:

8 to 26 inches—yellowish brown clay loam; very strongly acid

26 to 38 inches—yellowish brown gravelly clay loam; very strongly acid

Bedrock:

38 to 50 inches—unweathered bedrock

22—Cupco silt loam, 0 to 2 percent slopes, rarely flooded

Map Unit Composition

Major components

Cupco and similar soils: 90 percent

Contrasting inclusions

Woodall soils: 10 percent

Characteristics of the Cupco Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Poorly drained

Permeability: Moderately slow (about 1.41 micrometers/sec)

Available water capacity: High (about 12.0 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: Rare

Ponding: None

Seasonal water saturation: At a depth of about 6 to 24 inches (perched)

Runoff class: Medium

Land capability classification, nonirrigated: 3w

Typical profile

Surface layer:

0 to 3 inches—grayish brown silt loam; slightly acid

Subsoil:

3 to 25 inches—strong brown and light brownish gray silt loam; moderately acid

25 to 41 inches—strong brown and light brownish gray silty clay loam; slightly alkaline

41 to 62 inches—strong brown and light brownish gray silty clay loam; slightly alkaline

62 to 80 inches—strong brown and light brownish gray silty clay loam; slightly alkaline

23—Dam

This map unit includes earthen and concrete dams. These areas are used to hold water for reservoirs.

24—Dela fine sandy loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Composition

Major components

Dela and similar soils: 85 to 95 percent

Contrasting inclusions

Woodall soils: 2 to 10 percent

Characteristics of the Dela Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy alluvium derived from sandstone

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Moderate (about 7.7 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Occasional

Ponding: None

Seasonal water saturation: At a depth of about 36 to 60 inches (apparent)

Runoff class: Very low

Land capability classification, nonirrigated: 2w

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown fine sandy loam; strongly acid

Substratum:

3 to 8 inches—brown fine sandy loam; strongly acid

8 to 45 inches—yellowish brown fine sandy loam; strongly acid

45 to 51 inches—yellowish brown fine sandy loam; very strongly acid

51 to 80 inches—yellowish brown and light brownish gray very gravelly fine sandy loam; very strongly acid

**25—Dela fine sandy loam, 0 to 2 percent slopes,
frequently flooded**

Map Unit Composition

Major components

Dela and similar soils: 85 to 95 percent

Contrasting inclusions

Woodall soils: 2 to 10 percent

Characteristics of the Dela Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy alluvium derived from sandstone

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Moderate (about 7.7 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Frequent

Ponding: None

Seasonal water saturation: At a depth of about 36 to 60 inches (apparent)

Runoff class: Very low

Land capability classification, nonirrigated: 5w

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown fine sandy loam; strongly acid

Substratum:

3 to 8 inches—brown fine sandy loam; strongly acid

8 to 45 inches—yellowish brown fine sandy loam; strongly acid

45 to 51 inches—yellowish brown fine sandy loam; very strongly acid

51 to 80 inches—yellowish brown and light brownish gray very gravelly fine sandy loam; very strongly acid

26—*Delight silty clay, 3 to 8 percent slopes*

Map Unit Composition

Major components

Delight and similar soils: 95 to 100 percent

Contrasting inclusions

Billstown: 0 to 5 percent

Japany: 0 to 5 percent

Characteristics of the Delight Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Clayey marine deposits derived from claystone

Slope: 3 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Moderately well drained

Permeability: Moderately slow (about 1.42 micrometers/sec)

Available water capacity: Low (about 4.9 inches)

Shrink-swell potential: Very high (about 10.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 8 inches—very dark grayish brown silty clay; slightly alkaline

Subsoil:

8 to 14 inches—olive brown silty clay; slightly alkaline

14 to 30 inches—light olive brown silty clay that has light olive brown iron depletions; moderately alkaline

30 to 80 inches—gray silty clay that has yellowish brown masses of oxidized iron; moderately alkaline

27—*Gurdon fine sandy loam, 0 to 2 percent slopes, occasionally flooded*

Map Unit Composition

Major components

Gurdon and similar soils: 80 to 95 percent

Contrasting inclusions

Guyton soils: 0 to 10 percent

Characteristics of the Gurdon Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Coarse-silty alluvium
Slope: 0 to 2 percent (southeast aspect)
Surface fragments: None
Restrictive features: None
Drainage class: Somewhat poorly drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: High (about 10.2 inches)
Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)
Flooding: Occasional
Ponding: None
Seasonal water saturation: At a depth of about 12 to 24 inches (apparent)
Runoff class: Low
Land capability classification, nonirrigated: 2w

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown fine sandy loam; strongly acid

Subsoil:

3 to 16 inches—brown fine sandy loam that has pale brown iron depletions; strongly acid

16 to 30 inches—strong brown loam that has pale brown and light brownish gray iron depletions; strongly acid

30 to 65 inches—33 percent strong brown, 33 percent gray, and 33 percent red silty clay loam; very strongly acid

Substratum:

65 to 72 inches—33 percent strong brown, 33 percent gray, and 33 percent red very gravelly silty clay loam; very strongly acid

28—Guyton silt loam, 0 to 2 percent slopes, rarely flooded

Map Unit Composition

Major components

Guyton and similar soils: 90 to 100 percent

Contrasting inclusions

Ouachita: 0 to 5 percent

Sardis: 0 to 5 percent

Characteristics of the Guyton Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Fine-silty alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Poorly drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: High (about 11.5 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Rare

Ponding: None

Seasonal water saturation: At the surface to a depth of about 12 inches (apparent)

Runoff class: Low

Land capability classification, nonirrigated: 4w

Typical profile

Surface layer:

0 to 5 inches—dark grayish brown silt loam that has light brownish gray iron depletions; very strongly acid

Subsurface layer:

5 to 12 inches—grayish brown very fine sandy loam that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

Subsoil:

12 to 47 inches—50 percent gray and 50 percent yellowish brown silty clay loam; very strongly acid

Substratum:

47 to 73 inches—light brownish gray sandy clay loam that has yellowish brown masses of oxidized iron; very strongly acid

29—Guyton silt loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Composition

Major components

Guyton and similar soils: 95 to 100 percent

Contrasting inclusions

Ouachita: 0 to 5 percent

Sardis: 0 to 5 percent

Characteristics of the Guyton Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Fine-silty alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Poorly drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: High (about 11.5 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Occasional

Ponding: None

Seasonal water saturation: At the surface to a depth of about 12 inches (apparent)

Runoff class: Low

Land capability classification, nonirrigated: 4w

Typical profile

Surface layer:

0 to 5 inches—light brownish gray silt loam that has brown masses of oxidized iron; very strongly acid

Subsurface layer:

5 to 15 inches—gray silt loam that has yellowish brown masses of oxidized iron; very strongly acid

Subsoil:

- 15 to 40 inches—gray silty clay loam that has yellowish brown masses of oxidized iron; very strongly acid
- 40 to 80 inches—strong brown silty clay loam that has light brownish gray iron depletions; very strongly acid

30—Guyton silt loam, 0 to 1 percent slopes, ponded

Map Unit Composition

Major components

Guyton and similar soils: 95 to 100 percent

Contrasting inclusions

Ouachita soils: 0 to 5 percent

Una soils: 0 to 5 percent

Characteristics of the Guyton Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Fine-silty alluvium

Slope: 0 to 1 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Poorly drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: High (about 11.5 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: Frequent

Seasonal water saturation: At the surface (apparent)

Runoff class: Low

Land capability classification, nonirrigated: 7w

Typical profile

Surface layer:

- 0 to 5 inches—light brownish gray silt loam that has brown masses of oxidized iron; very strongly acid

Subsurface layer:

- 5 to 15 inches—gray silt loam that has yellowish brown masses of oxidized iron; very strongly acid

Subsoil:

- 15 to 40 inches—gray silty clay loam that has yellowish brown masses of oxidized iron; very strongly acid
- 40 to 80 inches—strong brown silty clay loam that has light brownish gray iron depletions; very strongly acid

31—Japany silty clay loam, 1 to 5 percent slopes

Map Unit Composition

Major components

Japany and similar soils: 85 to 95 percent

Contrasting inclusions

Smithton soils: 0 to 15 percent

Characteristics of the Japany Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Marl and/or clayey marine deposits

Slope: 1 to 5 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Somewhat poorly drained

Permeability: Very slow or impermeable (about 0.00 micrometers/sec)

Available water capacity: High (about 11.8 inches)

Shrink-swell potential: Very high (about 17.0 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 12 to 18 inches (perched)

Runoff class: Medium

Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 6 inches—brown silty clay loam; neutral

Subsoil:

6 to 12 inches—light yellowish brown silty clay loam; redoximorphic features in shades of gray; strongly acid

12 to 22 inches—light yellowish brown and yellowish brown silty clay; redoximorphic features in shades of red; strongly acid

22 to 37 inches—gray and strong brown clay; redoximorphic features in shades of red; moderately acid

37 to 55 inches—light grayish brown and yellowish brown silty clay; redoximorphic features in shades of gray; moderately acid

Substratum:

55 to 80 inches; gray clay; redoximorphic features in shades of brown; moderately alkaline

32—Kenn fine sandy loam, 0 to 2 percent slopes, rarely flooded

Map Unit Composition

Major components

Kenn and similar soils: 85 to 98 percent

Contrasting inclusions

Dela soils: 2 to 10 percent

Characteristics of the Kenn Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy alluvium derived from sandstone and shale

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None
Restrictive features: None
Drainage class: Well drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: Low (about 5.1 inches)
Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)
Flooding: Rare
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: Low
Land capability classification, nonirrigated: 2e

Typical profile

Surface layer:

0 to 6 inches—dark yellowish brown fine sandy loam; strongly acid

Subsoil:

6 to 12 inches—yellowish brown gravelly loam; strongly acid

12 to 28 inches—yellowish red gravelly sandy clay loam; very strongly acid

28 to 42 inches—yellowish brown very gravelly loam; very strongly acid

Substratum:

42 to 80 inches—yellowish brown extremely gravelly loam; very strongly acid

**33—Kenn fine sandy loam, 0 to 3 percent slopes,
occasionally flooded**

Map Unit Composition

Major components

Kenn and similar soils: 90 percent

Contrasting inclusions

Woodall soils: 10 percent

Characteristics of the Kenn Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy alluvium derived from sandstone

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.1 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: Occasional

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 2e

Typical profile

Surface layer:

0 to 6 inches—dark yellowish brown fine sandy loam; strongly acid

Subsoil:

- 6 to 12 inches—yellowish brown gravelly loam; strongly acid
- 12 to 28 inches—yellowish red gravelly sandy clay loam; very strongly acid
- 28 to 42 inches—yellowish brown very gravelly loam; very strongly acid

Substratum:

- 42 to 80 inches—yellowish brown extremely gravelly loam; very strongly acid

**34—Kenn very fine sandy loam, 0 to 2 percent slopes,
frequently flooded**

Map Unit Composition

Major components

Kenn and similar soils: 90 percent

Contrasting inclusions

Ceda soils: 5 percent

Aquents soils: 5 percent

Characteristics of the Kenn Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy alluvium derived from sandstone and shale

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.1 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: Frequent

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 5w

Typical profile

Surface layer:

- 0 to 6 inches—dark yellowish brown very fine sandy loam; strongly acid

Subsoil:

- 6 to 12 inches—yellowish brown gravelly loam; strongly acid
- 12 to 28 inches—yellowish red gravelly sandy clay loam; very strongly acid
- 28 to 42 inches—yellowish brown very gravelly loam; very strongly acid

Substratum:

- 42 to 80 inches—yellowish brown extremely gravelly loam; very strongly acid

**35—Kenn-Ceda complex, 0 to 3 percent slopes,
frequently flooded**

Map Unit Composition

Major components

Kenn and similar soils: 55 percent

Ceda and similar soils: 35 percent

Contrasting inclusions

Woodall soils: 10 percent

Characteristics of the Kenn Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy alluvium derived from sandstone

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.1 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: Frequent

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 5w

Typical profile

Surface layer:

0 to 6 inches—dark yellowish brown cobbly fine sandy loam; strongly acid

Subsoil:

6 to 12 inches—yellowish brown gravelly loam; strongly acid

12 to 28 inches—yellowish red gravelly sandy clay loam; very strongly acid

28 to 42 inches—yellowish brown very gravelly loam; very strongly acid

Substratum:

42 to 80 inches—yellowish brown extremely gravelly loam; very strongly acid

Characteristics of the Ceda Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Gravelly alluvium

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Rapid (about 42.34 micrometers/sec)

Available water capacity: Low (about 5.4 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Frequent

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Negligible

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 12 inches—brown very cobbly fine sandy loam; strongly acid

Substratum:

- 12 to 22 inches—dark yellowish brown very cobbly fine sandy loam; moderately acid
- 22 to 55 inches—dark yellowish brown extremely gravelly fine sandy loam; moderately acid
- 55 to 80 inches—dark yellowish brown extremely cobbly fine sandy loam; moderately acid

36—Kizzia silt loam, 3 to 8 percent slopes

Map Unit Composition

Major components

Kizzia and similar soils: 85 to 95 percent

Contrasting inclusions

McCaskill soils: 0 to 15 percent

Characteristics of the Kizzia Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Hillslope position: Side slopes

Parent material: Loamy marine deposits

Slope: 3 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: Fragipan at a depth of 32 to 40 inches

Drainage class: Moderately well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 7.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 16 to 30 inches (perched)

Runoff class: Low

Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

- 0 to 4 inches—brown silt loam; moderately acid

Subsoil:

- 4 to 7 inches—dark brown silt loam; slightly acid
- 7 to 12 inches—strong brown silt loam; slightly acid
- 12 to 36 inches—red loam; neutral
- 36 to 80 inches—yellowish brown, light gray, and dark yellowish brown loam; very strongly acid

**37—Leeper silty clay loam, 0 to 2 percent slopes,
occasionally flooded**

Map Unit Composition

Major components

Leeper and similar soils: 90 to 100 percent

Contrasting inclusions

Guyton soils: 0 to 10 percent

Characteristics of the Leeper Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Clayey alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Somewhat poorly drained

Permeability: Very slow or impermeable (about 0.00 micrometers/sec)

Available water capacity: High (about 11.9 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: Occasional

Ponding: None

Seasonal water saturation: At a depth of about 12 to 24 inches (apparent)

Runoff class: Low

Land capability classification, nonirrigated: 2w

Typical profile

Surface layer:

0 to 15 inches—dark grayish brown silty clay loam that has strong brown iron-manganese masses and gray iron depletions; moderately acid

Subsoil:

15 to 50 inches—gray clay that has strong brown iron-manganese masses; very strongly acid

50 to 72 inches—gray clay that has yellowish brown iron-manganese masses; slightly acid

Substratum:

72 to 90 inches—gray clay that has yellowish brown iron-manganese masses; moderately alkaline

38—Littlefir-Carnasaw complex, 1 to 8 percent slopes

Map Unit Composition

Major components

Littlefir and similar soils: 45 to 70 percent

Carnasaw and similar soils: 15 to 35 percent

Contrasting inclusions

Mazarn soils: 5 to 10 percent

Characteristics of the Littlefir Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes (fig. 5)

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 50 inches (paralithic)



Figure 5.—An area of Littlefir-Carnasaw complex, 1 to 8 percent slopes. This map unit is well suited to pasture and hayland.

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Low (about 5.9 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown silt loam; strongly acid

Subsurface layer:

3 to 9 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

9 to 22 inches—red silty clay; very strongly acid

22 to 35 inches—red silty clay that has light brownish gray and strong brown iron depletions; very strongly acid

35 to 43 inches—red very channery clay that has strong brown and light brownish gray iron depletions; strongly acid

Substratum:

43 to 50 inches—red, gray, and strong brown, fractured, interbedded, tilted, soft, acid shale and sandstone

Characteristics of the Carnasaw Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Crests

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None
Restrictive features: Bedrock at a depth of 40 to 60 inches (paralithic)
Drainage class: Well drained
Permeability: Slow (about 0.42 micrometers/sec)
Available water capacity: Moderate (about 7.2 inches)
Shrink-swell potential: High (about 7.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: Very high
Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 3 inches—brown silt loam; strongly acid

Subsurface layer:

3 to 10 inches—yellowish brown cobbly fine sandy loam; very strongly acid

Subsoil:

10 to 40 inches—strong brown silty clay that has yellowish brown iron depletions; very strongly acid

40 to 58 inches—red and light yellowish brown silty clay that has light brownish gray iron depletions; very strongly acid

Substratum:

58 to 60 inches—fractured and tilted shale and interbedded sandstone and shale in shades of red, brown, yellow, and gray

39—Magnet variant cobbly silt loam, 15 to 35 percent slopes

Map Unit Composition

Major components

Magnet and similar soils: 95 percent

Contrasting inclusions

Rock outcrop: 5 percent

Characteristics of the Magnet Variant Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Backslopes of a ring-dike complex

Shape of the slope: Linear down the slope and convex across the slope

Parent material: Clayey residuum from lamproite, syenite, and other intrusive igneous rocks

Slope: 15 to 35 percent slopes

Surface fragments: None

Restrictive features: Paralithic contact at a depth of 20 to 50 inches

Drainage class: Well drained

Permeability: Moderately slow (about 1.41 micrometers/sec)

Available water capacity: High (about 9.6 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 8 inches—dark grayish brown cobbly silt loam; strongly acid

Subsoil:

8 to 23 inches—olive brown cobbly clay; slightly acid

23 to 31 inches—olive brown cobbly clay loam; slightly acid

Substratum:

31 to 80 inches—light olive brown, soft lamproite

40—Marietta loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Composition

Major components

Marietta and similar soils: 95 percent

Contrasting inclusions

Leeper soils: 5 percent

Characteristics of the Marietta Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Clayey alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: High (about 9.6 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: Occasional

Ponding: None

Seasonal water saturation: At a depth of about 18 to 24 inches (apparent)

Runoff class: Negligible

Land capability classification, nonirrigated: 2w

Typical profile

Surface layer:

0 to 16 inches—dark grayish brown loam; neutral

Subsoil:

16 to 29 inches—reddish brown silty clay loam; neutral

29 to 57 inches—reddish brown silty clay loam; neutral

57 to 72 inches—strong brown silty clay loam; moderately alkaline

Substratum:

72 to 85 inches—light brownish gray silty clay loam; moderately alkaline

41—Mazarn silt loam, 0 to 3 percent slopes

Map Unit Composition

Major components

Mazarn and similar soils: 80 to 100 percent

Contrasting inclusions

Bonnerdale soils: 0 to 10 percent

Mazarn soils: 0 to 10 percent

Characteristics of the Mazarn Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Concave, open depressions

Shape of the slope: Concave down the slope and linear across the slope

Hillslope position: Base slopes (fig. 6)

Parent material: Loamy slope alluvium derived from sandstone and shale

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Somewhat poorly drained

Permeability: Moderately slow (about 1.41 micrometers/sec)

Available water capacity: Moderate (about 6.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 12 to 24 inches (apparent)

Runoff class: Medium

Land capability classification, nonirrigated: 3w

Typical profile

Surface layer:

0 to 4 inches—dark grayish brown silt loam; strongly acid



Figure 6.—An area of Mazarn silt loam, 0 to 3 percent slopes, in the middle ground and Sherless-Littlefir complex, 1 to 8 percent slopes, in the foreground and background. These soils are well suited to pasture and hayland.

Subsoil:

- 4 to 10 inches—yellowish brown silt loam; strongly acid
- 10 to 21 inches—yellowish brown silty clay loam; strongly acid
- 21 to 36 inches—light brownish gray silty clay loam; strongly acid

Substratum:

- 36 to 40 inches—soft, acid shale that is tilted, fractured, and laminated; seams of loamy and clayey soil material between the fractures

42—Mazarn silt loam, 0 to 3 percent slopes, occasionally flooded

Map Unit Composition

Major components

Mazarn and similar soils: 90 percent

Contrasting inclusions

Woodall soils: 10 percent

Characteristics of the Mazarn Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Upland drainageways

Shape of the slope: Concave down the slope and linear across the slope

Parent material: Loamy slope alluvium derived from sandstone and shale

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Somewhat poorly drained

Permeability: Moderately slow (about 1.41 micrometers/sec)

Available water capacity: Moderate (about 6.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Occasional

Ponding: None

Seasonal water saturation: At a depth of about 12 to 24 inches (apparent)

Runoff class: Medium

Land capability classification, nonirrigated: 3w

Typical profile

Surface layer:

- 0 to 4 inches—dark grayish brown silt loam; strongly acid

Subsoil:

- 4 to 10 inches—yellowish brown silt loam; strongly acid
- 10 to 21 inches—yellowish brown silty clay loam; strongly acid
- 21 to 36 inches—light brownish gray silty clay loam; strongly acid

Substratum:

- 36 to 40 inches—soft, acid shale that is tilted, fractured, and laminated; seams of loamy and clayey soil material between the fractures

43—McCaskill fine sandy loam, 0 to 2 percent slopes

Map Unit Composition

Major components

McCaskill and similar soils: 85 to 95 percent

Contrasting inclusions

Smithton soils: 0 to 10 percent

Characteristics of the McCaskill Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and linear across the slope

Parent material: Coarse-loamy marine deposits

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Somewhat poorly drained

Permeability: Moderately slow (about 1.41 micrometers/sec)

Available water capacity: Moderate (about 7.6 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Very rare

Ponding: None

Seasonal water saturation: At a depth of about 12 to 18 inches (perched)

Runoff class: Low

Land capability classification, nonirrigated: 2w

Typical profile

Surface layer:

0 to 4 inches—dark grayish brown fine sandy loam; redoximorphic features in shades of brown; moderately acid

Subsoil:

4 to 13 inches—light brownish gray fine sandy loam; redoximorphic features in shades of brown; moderately acid

13 to 23 inches—light yellowish brown loam; redoximorphic features in shades of brown and gray; very strongly acid

23 to 37 inches—light yellowish brown loam; redoximorphic features in shades of brown; very strongly acid

37 to 61 inches—light gray and yellowish brown sandy clay loam; redoximorphic features in shades of red; very strongly acid

61 to 79 inches—gray sandy clay loam; redoximorphic features in shades of red and brown; very strongly acid

44—Mena gravelly silt loam, 1 to 6 percent slopes

Map Unit Composition

Major components

Mena and similar soils: 95 to 100 percent

Contrasting inclusions

Avilla soils: 0 to 5 percent

Littlefir soils: 0 to 5 percent

Wetsaw soils: 0 to 5 percent

Characteristics of the Mena Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Treads on strath terraces

Shape of the slope: Convex down the slope and linear across the slope

Soil Survey of Pike County, Arkansas

Parent material: Clayey pedisegment derived from sandstone and shale
Slope: 1 to 6 percent (southeast aspect)
Surface fragments: None
Restrictive features: None
Drainage class: Moderately well drained
Permeability: Moderately slow (about 1.41 micrometers/sec)
Available water capacity: Moderate (about 8.6 inches)
Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: At a depth of about 24 to 36 inches (perched)
Runoff class: Medium
Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 5 inches—strong brown gravelly silt loam; strongly acid

Subsoil:

5 to 12 inches—yellowish red loam; strongly acid

12 to 19 inches—red silty clay loam; strongly acid

19 to 31 inches—red silty clay; very strongly acid

31 to 62 inches—red gravelly silty clay that has light brownish gray iron depletions; very strongly acid

Substratum:

62 to 80 inches—red, gray, and strong brown interbedded soft, acid sandstone and shale that is fractured, tilted, and interbedded

45—Mena gravelly silt loam, 6 to 12 percent slopes

Map Unit Composition

Major components

Mena and similar soils: 80 to 100 percent

Contrasting inclusions

Avilla soils: 0 to 5 percent

Littlefir soils: 0 to 5 percent

Sherless soils: 0 to 5 percent

Characteristics of the Mena Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Risers on strath terraces

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Clayey pedisegment derived from sandstone and shale

Slope: 6 to 12 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Moderately slow (about 1.41 micrometers/sec)

Available water capacity: Moderate (about 8.6 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 24 to 36 inches (perched)

Runoff class: High

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 5 inches—strong brown gravelly silt loam; strongly acid

Subsoil:

5 to 12 inches—yellowish red loam; strongly acid

12 to 19 inches—red silty clay loam; strongly acid

19 to 31 inches—red silty clay; very strongly acid

31 to 62 inches—red gravelly silty clay that has light brownish gray iron depletions;
very strongly acid

Substratum:

62 to 80 inches—red, gray, and strong brown interbedded soft, acid sandstone and
shale that is fractured, tilted, and interbedded

46—Mena silt loam, 1 to 6 percent slopes

Map Unit Composition

Major components

Mena and similar soils: 95 to 100 percent

Contrasting inclusions

Avilla soils: 0 to 5 percent

Littlefir soils: 0 to 5 percent

Wetsaw soils: 0 to 5 percent

Characteristics of the Mena Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Risers on strath terraces

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Clayey pedisegment derived from sandstone and shale

Slope: 1 to 6 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Moderately slow (about 1.41 micrometers/sec)

Available water capacity: Moderate (about 8.8 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 24 to 36 inches (perched)

Runoff class: Medium

Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 5 inches—strong brown silt loam; strongly acid

Subsoil:

5 to 12 inches—yellowish red loam; strongly acid

12 to 19 inches—red silty clay loam; strongly acid

19 to 31 inches—red silty clay; very strongly acid

31 to 62 inches—red gravelly silty clay that has light brownish gray iron depletions;
very strongly acid

Substratum:

62 to 80 inches—red, gray, and strong brown interbedded soft, acid sandstone and shale that is fractured, tilted, and interbedded

47—Murfreesboro gravelly loam, 1 to 6 percent slopes

Map Unit Composition

Major components

Murfreesboro and similar soils: 85 to 95 percent

Contrasting inclusions

Gurdon soils: 0 to 10 percent

Characteristics of the Murfreesboro Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Treads on stream terraces

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Loamy alluvium

Slope: 1 to 6 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 8.4 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 6 inches—dark grayish brown gravelly loam; moderately alkaline

Subsoil:

6 to 31 inches—red clay loam; neutral

31 to 42 inches—red clay loam; slightly acid

42 to 80 inches—red and light red loam; strongly acid

48—Murfreesboro loam, 1 to 6 percent slopes

Map Unit Composition

Major components

Murfreesboro and similar soils: 85 to 95 percent

Contrasting inclusions

Gurdon soils: 0 to 10 percent

Characteristics of the Murfreesboro Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Treads on stream terraces

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Loamy alluvium
Slope: 1 to 6 percent (southeast aspect)
Surface fragments: None
Restrictive features: None
Drainage class: Well drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: Moderate (about 8.4 inches)
Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: Low
Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:
0 to 6 inches—dark grayish brown loam; moderately alkaline
Subsoil:
6 to 31 inches—red clay loam; neutral
31 to 42 inches—red clay loam; slightly acid
42 to 80 inches—red and light red loam; strongly acid

49—Nathan fine sandy loam, 3 to 8 percent slopes

Map Unit Composition

Major components

Nathan and similar soils: 85 to 95 percent

Contrasting inclusions

Tiak soils: 0 to 15 percent

Characteristics of the Nathan Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain
Landform: Interfluves
Shape of the slope: Concave down the slope and convex across the slope
Parent material: Loamy marine deposits
Slope: 3 to 8 percent (southeast aspect)
Surface fragments: None
Restrictive features: None
Drainage class: Well drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: High (about 9.6 inches)
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: At a depth of about 16 to 30 inches (perched)
Runoff class: Medium
Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:
0 to 7 inches—very dark grayish brown fine sandy loam; strongly acid
Subsurface layer:
7 to 14 inches—brownish yellow silt loam; moderately acid

Subsoil:

- 14 to 19 inches—brownish yellow silt loam; moderately acid
- 19 to 26 inches—strong brown silty clay loam; strongly acid
- 26 to 35 inches—silty clay loam; very strongly acid
- 35 to 50 inches—strong brown silt loam; very strongly acid

Substratum:

- 50 to 80 inches—yellow loam; very strongly acid

50—Nashoba-Bismarck-Littlefir complex, 1 to 8 percent slopes

Map Unit Composition

Major components

- Nashoba and similar soils: 50 percent
- Bismarck and similar soils: 25 percent
- Littlefir and similar soils: 20 percent

Contrasting inclusions

- Mazarn soils: 5 percent

Characteristics of the Nashoba Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Gravelly residuum that weathered from sandstone

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (lithic)

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Very low (about 2.1 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 4s

Typical profile

Surface layer:

- 0 to 4 inches—brown cobbly fine sandy loam; strongly acid

Subsoil:

- 4 to 12 inches—yellowish brown very gravelly fine sandy loam; strongly acid
- 12 to 28 inches—yellowish brown very gravelly fine sandy loam; very strongly acid

Substratum:

- 28 to 53 inches—90 percent fine-grained, soft, acid sandstone interbedded with thin layers of shale and siltstone; about 10 percent fine sandy loam in the fractures between the layers of bedrock

Bedrock:

- 53 to 60 inches—hard sandstone bedrock that is tilted and fractured

Characteristics of the Bismarck Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Soil Survey of Pike County, Arkansas

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Gravelly residuum that weathered from acid shale

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 10 to 20 inches (paralithic)

Drainage class: Somewhat excessively drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Very low (about 2.1 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 6 inches—brown gravelly silt loam; strongly acid

Subsoil:

6 to 10 inches—yellowish brown extremely channery silt loam; very strongly acid

10 to 16 inches—yellowish brown extremely channery silt loam; very strongly acid

Substratum:

16 to 20 inches—gray, tilted, weakly cemented, soft, acid shale that is fractured and contains thin seams of soil material

Characteristics of the Littlefir Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 50 inches (paralithic)

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Low (about 5.9 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown gravelly silt loam; strongly acid

Subsurface layer:

3 to 9 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

9 to 22 inches—red silty clay; very strongly acid

22 to 35 inches—red silty clay that has light brownish gray and strong brown iron depletions; very strongly acid

35 to 43 inches—red very channery clay that has strong brown and light brownish gray iron depletions; strongly acid

Substratum:

43 to 50 inches—red, gray, and strong brown, fractured, interbedded, tilted, soft, acid shale and sandstone

51—Nashoba-Bismarck-Littlefir complex, 8 to 15 percent slopes

Map Unit Composition

Major components

Nashoba and similar soils: 50 percent

Bismarck and similar soils: 25 percent

Littlefir and similar soils: 20 percent

Contrasting inclusions

Clebit soils: 0 to 5 percent

Sherless soils: 0 to 5 percent

Characteristics of the Nashoba Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Gravelly residuum that weathered from sandstone

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (lithic)

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Very low (about 2.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 4 inches—brown cobbly fine sandy loam; strongly acid

Subsoil:

4 to 12 inches—yellowish brown very gravelly fine sandy loam; strongly acid

12 to 28 inches—yellowish brown very gravelly fine sandy loam; very strongly acid

Substratum:

28 to 53 inches—90 percent fine-grained, soft, acid sandstone interbedded with thin layers of shale and siltstone; about 10 percent fine sandy loam in the fractures between the layers of bedrock

Bedrock:

53 to 60 inches—hard sandstone bedrock that is tilted and fractured

Characteristics of the Bismarck Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Soil Survey of Pike County, Arkansas

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Gravelly residuum that weathered from acid shale

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 10 to 20 inches (paralithic)

Drainage class: Somewhat excessively drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Very low (about 2.1 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 6 inches—brown cobbly silt loam; strongly acid

Subsoil:

6 to 10 inches—yellowish brown extremely channery silt loam; very strongly acid

10 to 16 inches—yellowish brown extremely channery silt loam; very strongly acid

Substratum:

16 to 20 inches—gray, tilted, weakly cemented, soft, acid shale that is fractured and contains thin seams of soil material

Characteristics of the Littlefir Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 50 inches (paralithic)

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Low (about 5.9 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

3 to 9 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

9 to 22 inches—red silty clay; very strongly acid

22 to 35 inches—red silty clay that has light brownish gray and strong brown iron depletions; very strongly acid

35 to 43 inches—red very channery clay that has strong brown and light brownish gray iron depletions; strongly acid

Substratum:

43 to 50 inches—red, gray, and strong brown, fractured, interbedded, tilted, soft, acid shale and sandstone

52—Nashoba-Littlefir-Sherless complex, 15 to 35 percent slopes, rubbly

Map Unit Composition

Major components

Nashoba and similar soils: 40 to 55 percent

Littlefir and similar soils: 15 to 30 percent

Sherless and similar soils: 5 to 20 percent

Contrasting inclusions

Clebit soils: 5 to 15 percent

Characteristics of the Nashoba Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Gravelly residuum that weathered from sandstone

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Restrictive features: Bedrock at a depth of 20 to 40 inches (lithic)

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Very low (about 2.1 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 4 inches—brown cobbly fine sandy loam; strongly acid

Subsoil:

4 to 12 inches—yellowish brown very gravelly fine sandy loam; strongly acid

12 to 28 inches—yellowish brown very gravelly fine sandy loam; very strongly acid

Substratum:

28 to 53 inches—90 percent fine-grained, soft, acid sandstone interbedded with thin layers of shale and siltstone; about 10 percent fine sandy loam in the fractures between the layers of bedrock

Bedrock:

53 to 60 inches—hard sandstone bedrock that is tilted and fractured

Characteristics of the Littlefir Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Soil Survey of Pike County, Arkansas

Hillslope position: Backslopes and side slopes
Parent material: Clayey residuum that weathered from shale and sandstone
Slope: 15 to 35 percent (southeast aspect)
Surface fragments: About 15 to 50 percent (subangular)
Restrictive features: Bedrock at a depth of 20 to 50 inches (paralithic)
Drainage class: Moderately well drained
Permeability: Slow (about 0.42 micrometers/sec)
Available water capacity: Moderate (about 6.0 inches)
Shrink-swell potential: High (about 7.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: High
Land capability classification, nonirrigated: 6s

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

3 to 9 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

9 to 22 inches—red silty clay; very strongly acid

22 to 35 inches—red silty clay that has light brownish gray and strong brown iron depletions; very strongly acid

35 to 43 inches—red very channery clay that has strong brown and light brownish gray iron depletions; strongly acid

Substratum:

43 to 50 inches—red, gray, and strong brown, fractured, interbedded, tilted, soft, acid shale and sandstone

Characteristics of the Sherless Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Loamy residuum that weathered from sandstone and shale

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.9 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 5 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

5 to 8 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

- 8 to 17 inches—strong brown fine sandy loam; strongly acid
- 17 to 27 inches—yellowish red clay loam; very strongly acid
- 27 to 39 inches—yellowish red, red, and brownish yellow very gravelly sandy clay loam; very strongly acid

Substratum:

- 39 to 45 inches—fractured, tilted, soft interbedded sandstone and shale in shades of red, brown, yellow, and gray

53—Neff loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Composition

Major components

Neff and similar soils: 80 to 95 percent

Contrasting inclusions

Cupco soils: 0 to 10 percent

Characteristics of the Neff Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Moderately slow (about 1.41 micrometers/sec)

Available water capacity: High (about 12.0 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: Occasional

Ponding: None

Seasonal water saturation: At a depth of about 6 to 30 inches (perched)

Runoff class: Medium

Land capability classification, nonirrigated: 2w

Typical profile

Surface layer:

- 0 to 3 inches—dark grayish brown loam; moderately acid

Subsoil:

- 3 to 14 inches—strong brown silt loam; moderately acid
- 14 to 26 inches—brownish yellow silt loam; strongly acid
- 26 to 48 inches—light brownish gray and strong brown silty clay loam; strongly acid
- 48 to 80 inches—gray and strong brown loam; very strongly acid

54—Ochlockonee fine sandy loam, 0 to 2 percent slopes, rarely flooded

Map Unit Composition

Major components

Ochlockonee and similar soils: 85 to 95 percent

Contrasting inclusions

Gurdon soils: 0 to 10 percent

Characteristics of the Ochlockonee Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Coarse-loamy alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Moderate (about 7.6 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Rare

Ponding: None

Seasonal water saturation: At a depth of about 36 to 60 inches (apparent)

Runoff class: Very low

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 4 inches—brown stratified fine sandy loam; strongly acid

Substratum:

4 to 39 inches—yellowish brown stratified sandy loam; strongly acid

39 to 55 inches—yellowish brown stratified fine sandy loam; very strongly acid

55 to 80 inches—brown stratified loamy sand; very strongly acid

55—Ochlockonee fine sandy loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Composition

Major components

Ochlockonee and similar soils: 85 to 95 percent

Contrasting inclusions

Gurdon soils: 0 to 10 percent

Characteristics of the Ochlockonee Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Coarse-loamy alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Moderate (about 7.6 inches)
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Flooding: Occasional
Ponding: None
Seasonal water saturation: At a depth of about 36 to 60 inches (apparent)
Runoff class: Very low
Land capability classification, nonirrigated: 2w

Typical profile

Surface layer:

0 to 4 inches—brown stratified fine sandy loam; strongly acid

Substratum:

4 to 39 inches—yellowish brown stratified sandy loam; strongly acid

39 to 55 inches—yellowish brown stratified fine sandy loam; very strongly acid

55 to 80 inches—brown stratified loamy sand; very strongly acid

**56—Ochlockonee fine sandy loam, 0 to 2 percent slopes,
frequently flooded**

Map Unit Composition

Major components

Ochlockonee and similar soils: 85 to 95 percent

Contrasting inclusions

Gurdon soils: 0 to 10 percent

Characteristics of the Ochlockonee Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Coarse-loamy alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Moderate (about 7.6 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Frequent

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very low

Land capability classification, nonirrigated: 4w

Typical profile

Surface layer:

0 to 4 inches—brown stratified fine sandy loam; strongly acid

Substratum:

4 to 39 inches—yellowish brown stratified sandy loam; strongly acid

39 to 55 inches—yellowish brown stratified fine sandy loam; very strongly acid

55 to 80 inches—brown stratified loamy sand; very strongly acid

57—Ouachita silt loam, 0 to 3 percent slopes, rarely flooded

Map Unit Composition

Major components

Ouachita and similar soils: 85 to 95 percent

Contrasting inclusions

Gurdon soils: 0 to 10 percent

Characteristics of the Ouachita Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Fine-silty alluvium

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderately slow (about 1.41 micrometers/sec)

Available water capacity: High (about 11.4 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: Rare

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 2e

Typical profile

Surface layer:

0 to 9 inches—dark grayish brown silt loam; strongly acid

Subsoil:

9 to 38 inches—dark yellowish brown silty clay loam; very strongly acid

38 to 52 inches—yellowish brown silty clay loam; very strongly acid

52 to 77 inches—strong brown loam; very strongly acid

Substratum:

77 to 80 inches—dark yellowish brown fine sandy loam; very strongly acid

58—Ouachita silt loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Composition

Major components

Ouachita and similar soils: 85 to 95 percent

Contrasting inclusions

Gurdon soils: 0 to 10 percent

Characteristics of the Ouachita Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Fine-silty alluvium

Slope: 0 to 2 percent (southeast aspect)
Surface fragments: None
Restrictive features: None
Drainage class: Well drained
Permeability: Moderately slow (about 1.41 micrometers/sec)
Available water capacity: High (about 11.4 inches)
Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)
Flooding: Occasional
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: Low
Land capability classification, nonirrigated: 2w

Typical profile

Surface layer:

0 to 9 inches—dark grayish brown silt loam; strongly acid

Subsoil:

9 to 38 inches—dark yellowish brown silty clay loam; very strongly acid

38 to 52 inches—yellowish brown silty clay loam; very strongly acid

52 to 77 inches—strong brown loam; very strongly acid

Substratum:

77 to 80 inches—dark yellowish brown fine sandy loam; very strongly acid

59—Ozan fine sandy loam, 0 to 2 percent slopes, rarely flooded

Map Unit Composition

Major components

Ozan and similar soils: 95 to 100 percent

Contrasting inclusions

Guyton soils: 0 to 5 percent

Sardis soils: 0 to 5 percent

Toine soils: 0 to 5 percent

Characteristics of the Ozan Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Coarse-loamy alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Poorly drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: High (about 9.4 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Rare

Ponding: None

Seasonal water saturation: At a depth of about 12 to 30 inches (apparent)

Runoff class: Medium

Land capability classification, nonirrigated: 3w

Typical profile

Surface layer:

0 to 1 inch—yellowish brown fine sandy loam; strongly acid

Subsoil:

- 1 to 7 inches—light brownish gray fine sandy loam; strongly acid
- 7 to 15 inches—grayish brown fine sandy loam; very strongly acid
- 15 to 24 inches—light brownish gray fine sandy loam; very strongly acid
- 24 to 46 inches—light gray loam; very strongly acid

**60—Ozan fine sandy loam, 0 to 2 percent slopes,
occasionally flooded**

Map Unit Composition

Major components

Ozan and similar soils: 95 to 100 percent

Contrasting inclusions

Guyton soils: 0 to 5 percent

Sardis soils: 0 to 5 percent

Toine soils: 0 to 5 percent

Characteristics of the Ozan Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Coarse-loamy alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Poorly drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: High (about 9.4 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Occasional

Ponding: None

Seasonal water saturation: At a depth of about 12 to 30 inches (apparent)

Runoff class: Low

Land capability classification, nonirrigated: 4w

Typical profile

Surface layer:

- 0 to 1 inch—yellowish brown fine sandy loam; strongly acid

Subsoil:

- 1 to 7 inches—light brownish gray fine sandy loam; very strongly acid
- 7 to 15 inches—grayish brown fine sandy loam; very strongly acid
- 15 to 24 inches—light brownish gray fine sandy loam; very strongly acid
- 24 to 46 inches—light gray loam; very strongly acid

**61—Peanutrock very gravelly fine sandy loam, 3 to 8
percent slopes**

Map Unit Composition

Major components

Peanutrock and similar soils: 85 to 95 percent

Contrasting inclusions

Pikeville soils: 5 to 10 percent

Tiak soils: 0 to 5 percent

Sardis soils: 0 to 5 percent

Characteristics of the Peanutrock Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Side slopes (fig. 7)

Parent material: Gravelly marine deposits

Slope: 3 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.8 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 4 inches—very dark grayish brown very gravelly fine sandy loam; moderately acid

Subsurface layer:

4 to 10 inches—light yellowish brown very gravelly fine sandy loam; strongly acid

Subsoil:

10 to 33 inches—strong brown very gravelly loam; strongly acid

33 to 80 inches—reddish yellow extremely gravelly loamy sand; very strongly acid



Figure 7.—An area of Peanutrock very gravelly fine sandy loam, 3 to 8 percent slopes. This soil is well suited to timber production, which is the primary use of the soil in Pike County.

62—Peanutrock very gravelly fine sandy loam, 8 to 15 percent slopes

Map Unit Composition

Major components

Peanutrock and similar soils: 0 to 95 percent

Contrasting inclusions

Tiak soils: 0 to 10 percent

Characteristics of the Peanutrock Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Linear down the slope and convex across the slope

Parent material: Gravelly marine deposits

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.8 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 4 inches—very dark grayish brown very gravelly fine sandy loam; moderately acid

Subsurface layer:

4 to 10 inches—light yellowish brown very gravelly fine sandy loam; strongly acid

Subsoil:

10 to 33 inches—strong brown very gravelly loam; strongly acid

33 to 80 inches—reddish yellow extremely gravelly loamy sand; very strongly acid

63—Peanutrock very gravelly fine sandy loam, 15 to 35 percent slopes

Map Unit Composition

Major components

Peanutrock and similar soils: 85 to 95 percent

Contrasting inclusions

Pikeville soils: 5 to 10 percent

Tiak soils: 0 to 5 percent

Carnasaw soils: 0 to 5 percent

Characteristics of the Peanutrock Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes

Parent material: Gravelly marine deposits

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.8 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 4 inches—very dark grayish brown very gravelly fine sandy loam; moderately acid

Subsurface layer:

4 to 10 inches—light yellowish brown very gravelly fine sandy loam; strongly acid

Subsoil:

10 to 33 inches—strong brown very gravelly loam; strongly acid

33 to 80 inches—reddish yellow extremely gravelly loamy sand; very strongly acid

64—Peanutrock-Tiak complex, 8 to 15 percent slopes

Map Unit Composition

Major components

Peanutrock and similar soils: 40 to 60 percent

Tiak and similar soils: 25 to 45 percent

Contrasting inclusions

Stelltown soils: 0 to 10 percent

Characteristics of the Peanutrock Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves (fig. 8)

Shape of the slope: Convex down the slope and convex across the slope

Parent material: Gravelly marine deposits

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.8 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 4e



Figure 8.—An area of Peanutrock-Tiak complex, 8 to 15 percent slopes. This map unit is moderately suited to pasture and to ponds.

Typical profile

Surface layer:

0 to 4 inches—very dark grayish brown very gravelly fine sandy loam; moderately acid

Subsurface layer:

4 to 10 inches—light yellowish brown very gravelly fine sandy loam; strongly acid

Subsoil:

10 to 33 inches—strong brown very gravelly loam; strongly acid

33 to 80 inches—reddish yellow extremely gravelly loamy sand; very strongly acid

Characteristics of the Tiak Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Upland clayey marine deposits

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: High (about 9.8 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 6 inches—yellowish brown gravelly very fine sandy loam; strongly acid

Subsoil:

6 to 19 inches—yellowish red silty clay; very strongly acid

19 to 27 inches—yellowish red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

27 to 40 inches—red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

40 to 72 inches—red clay that has yellowish brown masses of oxidized iron and gray iron depletions; very strongly acid

65—Pikecity silt loam, 1 to 8 percent slopes

Map Unit Composition

Major components

Pikecity and similar soils: 80 to 90 percent

Contrasting inclusions

Peanutrock soils: 0 to 10 percent

Tiak soils: 0 to 10 percent

Characteristics of the Pikecity Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy marine deposits

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 6.1 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 3 inches—dark brown silt loam; strongly acid

Subsoil:

3 to 6 inches—strong brown silt loam; very strongly acid

6 to 22 inches—red clay loam; extremely acid

22 to 31 inches—red gravelly clay loam; extremely acid

31 to 48 inches—red gravelly clay; extremely acid

48 to 80 inches—dark yellowish brown, light gray, and yellowish brown cobbly clay loam; extremely acid

**66—Pikecreek gravelly loamy sand, 0 to 3 percent slopes,
frequently flooded**

Map Unit Composition

Major components

Pikecreek and similar soils: 95 to 100 percent

Contrasting inclusions

Antoine soils: 0 to 5 percent

Kizzia soils: 0 to 5 percent

Tiak soils: 0 to 5 percent

Characteristics of the Pikecreek Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Gravelly alluvium derived from sandstone

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Somewhat excessively drained

Permeability: Rapid (about 42.34 micrometers/sec)

Available water capacity: Low (about 5.4 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Frequent

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Negligible

Land capability classification, nonirrigated: 7w

Typical profile

Surface layer:

0 to 4 inches—brown gravelly loamy sand; strongly acid

Substratum:

4 to 20 inches—strong brown extremely gravelly loamy sand; strongly acid

20 to 33 inches—extremely gravelly loamy coarse sand; strongly acid

33 to 80 inches—strong brown extremely cobbly loamy coarse sand; very strongly acid

**67—Pirum-Sherless-Bonnerdale complex, 1 to 8 percent
slopes**

Map Unit Composition

Major components

Pirum and similar soils: 30 to 60 percent

Sherless and similar soils: 20 to 50 percent

Bonnerdale and similar soils: 10 to 40 percent

Contrasting inclusions

Littlefir soils: 0 to 5 percent

Mazarn soils: 0 to 5 percent

Nashoba soils: 0 to 5 percent

Sherwood soils : 0 to 5 percent

Characteristics of the Pirum Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and convex across the slope

Hillslope position: Side slopes

Parent material: Loamy residuum that weathered from sandstone

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 50 inches (lithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.5 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 4 inches—brown fine sandy loam; strongly acid

Subsurface layer:

4 to 8 inches—yellowish brown gravelly fine sandy loam; strongly acid

Subsoil:

8 to 26 inches—yellowish brown clay loam; very strongly acid

26 to 38 inches—yellowish brown gravelly clay loam; very strongly acid

Bedrock:

38 to 50 inches—unweathered bedrock

Characteristics of the Sherless Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and convex across the slope

Hillslope position: Side slopes

Parent material: Loamy residuum that weathered from sandstone and shale

Slope: 3 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.6 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 6 to 12 inches (perched)

Runoff class: Medium

Land capability classification, nonirrigated: 2e

Typical profile

Surface layer:

0 to 5 inches—dark grayish brown fine sandy loam; strongly acid

Subsurface layer:

5 to 8 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

8 to 17 inches—strong brown fine sandy loam; strongly acid

17 to 27 inches—yellowish red clay loam; very strongly acid

27 to 39 inches—yellowish red, red, and brownish yellow very gravelly sandy clay loam; very strongly acid

Substratum:

39 to 45 inches—fractured, tilted, soft interbedded sandstone and shale in shades of red, brown, yellow, and gray

Characteristics of the Bonnerdale Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Toeslopes and footslopes

Shape of the slope: Linear down the slope and concave across the slope

Hillslope position: Base slopes

Parent material: Loamy residuum that weathered from sandstone

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 40 to 60 inches (paralithic)

Drainage class: Somewhat poorly drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 7.7 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 6 to 12 inches (perched)

Runoff class: Medium

Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 3 inches—dark yellowish brown fine sandy loam; slightly acid

Subsoil:

3 to 13 inches—yellowish brown and light brownish gray fine sandy loam that has strong brown masses of oxidized iron; moderately acid

13 to 24 inches—strong brown and grayish brown fine sandy loam; strongly acid

24 to 35 inches—light brownish gray, brownish yellow, and strong brown fine sandy loam; strongly acid

35 to 43 inches—light brownish gray and strong brown fine sandy loam that has red masses of oxidized iron; very strongly acid

43 to 54 inches—pinkish gray and strong brown fine sandy loam; very strongly acid

Substratum:

54 to 60 inches—soft, partially weathered sandstone that is fractured and tilted

68—Pits and Udorthents association, 3 to 35 percent slopes

Map Unit Composition

Major components

Pits: 40 to 60 percent

Udorthents: 30 to 50 percent

Some areas of this map unit are on a flood plain, and therefore the potential for flooding exists. Decisions regarding future reclamation work and land use management need to take into account this potential as well as other site limitations.

Characteristics of the Pits

Areas of Pits consist of open mining pits and excavated hillsides in which mining operations are either currently taking place or have occurred in the past. There is no visible indication of any appreciable reclamation work, and the vegetation is typically sparse and natural in origin. Many of the pits contain water. The symbol "91" is used on the detailed soil maps to indicate where the water appears to be perennial in the deeper pits. The symbol is not used in the shallower excavations where the water level is shallower and fluctuation is most pronounced.

Characteristics of the Udorthents

Areas of Udorthents consist of mined areas or portions of mined areas that have been either partially or completely reclaimed. In these areas, the soil material has been mixed, backfilled, and shaped. Some of the areas contain piles of spoil. Udorthents have a wide range of characteristics. They have no definite arrangement of layers because of mixing during mining operations. Texture ranges from gravelly and channery loam to stony and extremely stony silty clay and clay. The content of coarse fragments ranges from about 3 to 70 percent.

69—Riverwash-Ceda complex, 0 to 3 percent slopes, frequently flooded

Map Unit Composition

Major components

Riverwash and similar soils: 50 to 80 percent

Ceda and similar soils: 20 to 40 percent

Contrasting inclusions

Woodall soils: 5 to 10 percent

Characteristics of the Riverwash

The Riverwash component of the map unit consists of unvegetated sand and gravel bars that migrate during the frequent flooding.

Characteristics of the Ceda Soil

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Gravelly alluvium

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Rapid (about 42.34 micrometers/sec)

Available water capacity: Low (about 5.4 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Frequent

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Negligible

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 12 inches—brown very cobbly fine sandy loam; strongly acid

Substratum:

12 to 22 inches—dark yellowish brown very cobbly fine sandy loam; moderately acid

22 to 55 inches—dark yellowish brown extremely gravelly fine sandy loam; moderately acid

55 to 80 inches—dark yellowish brown extremely cobbly fine sandy loam; moderately acid

70—Sardis silt loam, 0 to 2 percent slopes, rarely flooded

Map Unit Composition

Major components

Sardis and similar soils: 85 to 95 percent

Contrasting inclusions

Guyton soils: 0 to 15 percent

Characteristics of the Sardis Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Fine-silty alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Somewhat poorly drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 9.0 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: Rare

Ponding: None

Seasonal water saturation: At a depth of about 18 to 36 inches (apparent)

Runoff class: Low

Land capability classification, nonirrigated: 2e

Typical profile

Surface layer:

0 to 7 inches—grayish brown silt loam; strongly acid

Subsoil:

7 to 20 inches—brown silt loam; strongly acid

20 to 60 inches—light yellowish brown silty clay loam; very strongly acid

60 to 73 inches—light brownish gray silt loam; very strongly acid

Substratum:

73 to 80 inches—light brownish gray and yellowish brown silty clay loam; very strongly acid

71—Sardis silt loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Composition

Major components

Sardis and similar soils: 85 to 95 percent

Contrasting inclusions

Guyton soils: 0 to 15 percent

Characteristics of the Sardis Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Fine-silty alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Somewhat poorly drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 9.0 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: Occasional

Ponding: None

Seasonal water saturation: At a depth of about 18 to 36 inches (apparent)

Runoff class: Low

Land capability classification, nonirrigated: 2w

Typical profile

Surface layer:

0 to 7 inches—grayish brown silt loam; strongly acid

Subsoil:

7 to 20 inches—brown silt loam; strongly acid

20 to 60 inches—light yellowish brown silty clay loam; very strongly acid

60 to 73 inches—light brownish gray silt loam; very strongly acid

Substratum:

73 to 80 inches—light brownish gray and yellowish brown silty clay loam; very strongly acid

72—Sherless-Littlefir complex, 1 to 8 percent slopes

Map Unit Composition

Major components

Sherless and similar soils: 40 to 60 percent

Littlefir and similar soils: 30 to 50 percent

Contrasting inclusions

Nashoba soils: 5 percent

Mazarn soils: 5 percent

Characteristics of the Sherless Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Ridges and shoulders (fig. 9)



Figure 9.—An area of Sherless-Littlefir complex, 1 to 8 percent slopes. This map unit is well suited to pasture and moderately suited to ponds.

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Crests

Parent material: Loamy residuum that weathered from sandstone and shale

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.6 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 5 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

5 to 8 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

8 to 17 inches—strong brown fine sandy loam; strongly acid

17 to 27 inches—yellowish red clay loam; very strongly acid

27 to 39 inches—yellowish red, red, and brownish yellow very gravelly sandy clay loam; very strongly acid

Substratum:

39 to 45 inches—fractured, tilted, soft interbedded sandstone and shale in shades of red, brown, yellow, and gray

Characteristics of the Littlefir Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Ridges and shoulders

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Crests

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 50 inches (paralithic)

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Moderate (about 6.0 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

3 to 9 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

9 to 22 inches—red silty clay; very strongly acid

22 to 35 inches—red silty clay that has light brownish gray and strong brown iron depletions; very strongly acid

35 to 43 inches—red very channery clay that has strong brown and light brownish gray iron depletions; strongly acid

Substratum:

43 to 50 inches—red, gray, and strong brown, fractured, interbedded, tilted, soft, acid shale and sandstone

73—Sherless-Littlefir-Nashoba complex, 8 to 15 percent slopes

Map Unit Composition

Major components

Sherless and similar soils: 40 to 60 percent

Littlefir and similar soils: 20 to 30 percent

Nashoba and similar soils: 10 to 20 percent

Contrasting inclusions

Clebit soils: 5 to 15 percent

Characteristics of the Sherless Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes (fig. 10)

Shape of the slope: Convex down the slope and linear across the slope



Figure 10.—An area of Sherless-Littlefir-Nashoba complex, 8 to 15 percent slopes. This map unit is moderately suited to pasture and hayland, well suited to forestland, and moderately suited to ponds.

Parent material: Loamy residuum that weathered from sandstone and shale

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.6 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 5 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

5 to 8 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

8 to 17 inches—strong brown fine sandy loam; strongly acid

17 to 27 inches—yellowish red clay loam; very strongly acid

27 to 39 inches—yellowish red, red, and brownish yellow very gravelly sandy clay loam; very strongly acid

Substratum:

39 to 45 inches—fractured, tilted, soft interbedded sandstone and shale in shades of red, brown, yellow, and gray

Characteristics of the Littlefir Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 50 inches (paralithic)

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Moderate (about 6.0 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

3 to 9 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

9 to 22 inches—red silty clay; very strongly acid

22 to 35 inches—red silty clay that has light brownish gray and strong brown iron depletions; very strongly acid

35 to 43 inches—red very channery clay that has strong brown and light brownish gray iron depletions; strongly acid

Substratum:

43 to 50 inches—red, gray, and strong brown, fractured, interbedded, tilted, soft, acid shale and sandstone

Characteristics of the Nashoba Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Gravelly residuum that weathered from sandstone

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (lithic)

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Very low (about 2.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 6s

Typical profile

Surface layer:

0 to 4 inches—brown cobbly fine sandy loam; strongly acid

Subsoil:

4 to 12 inches—yellowish brown very gravelly fine sandy loam; strongly acid

12 to 28 inches—yellowish brown very gravelly fine sandy loam; very strongly acid

Substratum:

28 to 53 inches—90 percent fine-grained, soft, acid sandstone interbedded with thin layers of shale and siltstone; about 10 percent fine sandy loam in the fractures between the layers of bedrock

Bedrock:

53 to 60 inches—hard sandstone bedrock that is tilted and fractured

74—*Sherless-Littlefir-Nashoba complex, 15 to 35 percent slopes*

Map Unit Composition

Major components

Sherless and similar soils: 35 to 50 percent

Littlefir and similar soils: 25 to 35 percent

Nashoba and similar soils: 10 to 20 percent

Contrasting inclusions

Clebit soils: 5 to 15 percent

Characteristics of the Sherless Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Loamy residuum that weathered from sandstone and shale

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 5.6 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 6s

Typical profile

Surface layer:

0 to 5 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

5 to 8 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

8 to 17 inches—strong brown fine sandy loam; strongly acid

17 to 27 inches—yellowish red clay loam; very strongly acid

27 to 39 inches—yellowish red, red, and brownish yellow very gravelly sandy clay loam; very strongly acid

Substratum:

39 to 45 inches—fractured, tilted, soft interbedded sandstone and shale in shades of red, brown, yellow, and gray

Characteristics of the Littlefir Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 50 inches (paralithic)

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Moderate (about 6.0 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 6s

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Subsurface layer:

3 to 9 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

9 to 22 inches—red silty clay; very strongly acid

22 to 35 inches—red silty clay that has light brownish gray and strong brown iron depletions; very strongly acid

35 to 43 inches—red very channery clay that has strong brown and light brownish gray iron depletions; strongly acid

Substratum:

43 to 50 inches—red, gray, and strong brown, fractured, interbedded, tilted, soft, acid shale and sandstone

Characteristics of the Nashoba Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Linear down the slope and convex across the slope

Hillslope position: Backslopes and side slopes

Parent material: Gravelly residuum that weathered from sandstone

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (lithic)

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Very low (about 2.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: Medium
Land capability classification, nonirrigated: 6s

Typical profile

Surface layer:
0 to 4 inches—brown stony fine sandy loam; strongly acid
Subsoil:
4 to 12 inches—yellowish brown very gravelly fine sandy loam; strongly acid
12 to 28 inches—yellowish brown very gravelly fine sandy loam; very strongly acid
Substratum:
28 to 53 inches—90 percent fine-grained, soft, acid sandstone interbedded with thin layers of shale and siltstone; about 10 percent fine sandy loam in the fractures between the layers of bedrock
Bedrock:
53 to 60 inches—hard sandstone bedrock that is tilted and fractured

75—*Sherless-Nashoba complex, 3 to 8 percent slopes, extremely stony*

Map Unit Composition

Major components

Sherless and similar soils: 50 to 70 percent
Nashoba and similar soils: 20 to 40 percent

Contrasting inclusions

Rock outcrop: 0 to 10 percent
Clebit soils: 0 to 10 percent

Characteristics of the Sherless Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains
Landform: Ridges and side slopes
Shape of the slope: Convex down the slope and linear across the slope
Hillslope position: Interfluves
Parent material: Loamy residuum that weathered from sandstone and shale
Slope: 3 to 8 percent (southeast aspect)
Surface fragments: About 0.1 to 3 percent (subangular)
Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)
Drainage class: Well drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: Low (about 5.6 inches)
Shrink-swell potential: High (about 7.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: High
Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:
0 to 5 inches—dark grayish brown cobbly fine sandy loam; strongly acid

Soil Survey of Pike County, Arkansas

Subsurface layer:

5 to 8 inches—yellowish brown fine sandy loam; strongly acid

Subsoil:

8 to 17 inches—strong brown fine sandy loam; strongly acid

17 to 27 inches—yellowish red clay loam; very strongly acid

27 to 39 inches—yellowish red, red, and brownish yellow very gravelly sandy clay loam; very strongly acid

Substratum:

39 to 45 inches—fractured, tilted, soft interbedded sandstone and shale in shades of red, brown, yellow, and gray

Characteristics of the Nashoba Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Ridges and side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Interfluves

Parent material: Gravelly residuum that weathered from sandstone

Slope: 3 to 8 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Restrictive features: Bedrock at a depth of 20 to 40 inches (lithic)

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Very low (about 2.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 4 inches—brown cobbly fine sandy loam; strongly acid

Subsoil:

4 to 12 inches—yellowish brown very gravelly fine sandy loam; strongly acid

12 to 28 inches—yellowish brown very gravelly fine sandy loam; very strongly acid

Substratum:

28 to 53 inches—90 percent fine-grained, soft, acid sandstone interbedded with thin layers of shale and siltstone; about 10 percent fine sandy loam in the fractures between the layers of bedrock

Bedrock:

53 to 60 inches—hard sandstone bedrock that is tilted and fractured

76—Smithton fine sandy loam, 0 to 2 percent slopes

Map Unit Composition

Major components

Smithton and similar soils: 90 to 100 percent

Contrasting inclusions

McCaskill soils: 0 to 5 percent

Ouachita soils: 0 to 5 percent

Sardis soils: 0 to 5 percent

Stelltown soils: 0 to 5 percent

Characteristics of the Smithton Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and linear across the slope

Parent material: Coarse-loamy marine deposits

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Poorly drained

Permeability: Moderately slow (about 1.41 micrometers/sec)

Available water capacity: High (about 9.5 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At the surface to a depth of about 12 inches (apparent)

Runoff class: Low

Land capability classification, nonirrigated: 3w

Typical profile

Surface layer:

0 to 4 inches—dark grayish brown, light gray, dark gray, very pale brown, and yellowish red fine sandy loam; strongly acid

Subsoil:

4 to 7 inches—brown loamy sand that has very dark brown iron-manganese masses; very strongly acid

7 to 15 inches—gray sandy loam that has yellowish red iron-manganese masses; very strongly acid

15 to 61 inches—gray and light yellowish brown fine sandy loam that has red and brownish yellow iron-manganese masses; very strongly acid

61 to 82 inches—gray clay loam that has red and yellowish red iron-manganese masses; very strongly acid

77—Speer fine sandy loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Composition

Major components

Speer and similar soils: 85 to 98 percent

Contrasting inclusions

Cupco soils: 2 to 10 percent

Characteristics of the Speer Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy alluvium derived from sandstone and shale

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: High (about 9.5 inches)
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Flooding: Occasional
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: Low
Land capability classification, nonirrigated: 2w

Typical profile

Surface layer:

0 to 3 inches—dark yellowish brown fine sandy loam; strongly acid

Subsoil:

3 to 13 inches—yellowish brown fine sandy loam; strongly acid

13 to 34 inches—dark yellowish brown loam; strongly acid

34 to 72 inches—brown loam; very strongly acid

78—Speer fine sandy loam, 0 to 2 percent slopes, rarely flooded

Map Unit Composition

Major components

Speer and similar soils: 85 to 98 percent

Contrasting inclusions

Aquents soils: 2 to 10 percent

Characteristics of the Speer Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy alluvium derived from sandstone and shale

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: High (about 9.5 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Rare

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 2e

Typical profile

Surface layer:

0 to 3 inches—dark yellowish brown fine sandy loam; strongly acid

Subsoil:

3 to 13 inches—yellowish brown fine sandy loam; strongly acid

13 to 34 inches—dark yellowish brown loam; strongly acid

34 to 72 inches—brown loam; very strongly acid

79—Stelltown sandy loam, 1 to 6 percent slopes

Map Unit Composition

Major components

Stelltown and similar soils: 75 to 95 percent

Contrasting inclusions

Tiak soils: 0 to 10 percent

Peanutrock soils: 0 to 10 percent

Characteristics of the Stelltown Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Coarse-loamy marine deposits

Slope: 1 to 6 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 8.1 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 24 to 36 inches (apparent)

Runoff class: Low

Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 6 inches—dark gray sandy loam; slightly acid

Subsurface layer:

6 to 11 inches—light yellowish brown sandy loam; strongly acid

Subsoil:

11 to 27 inches—brownish yellow sandy loam

27 to 41 inches—yellowish brown sandy loam; very strongly acid

41 to 80 inches—variegated yellowish brown, gray, and red sandy clay loam; very strongly acid

80—Stelltown sandy loam, 6 to 12 percent slopes

Map Unit Composition

Major components

Stelltown and similar soils: 85 to 95 percent

Contrasting inclusions

Tiak soils: 0 to 15 percent

Characteristics of the Stelltown Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Coarse-loamy marine deposits

Slope: 6 to 12 percent (southeast aspect)
Surface fragments: None
Restrictive features: None
Drainage class: Moderately well drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: Moderate (about 8.1 inches)
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: At a depth of about 24 to 36 inches (apparent)
Runoff class: Medium
Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 6 inches—dark gray sandy loam; slightly acid

Subsurface layer:

6 to 11 inches—light yellowish brown sandy loam; strongly acid

Subsoil:

11 to 27 inches—brownish yellow sandy loam

27 to 41 inches—yellowish brown sandy loam; very strongly acid

41 to 80 inches—variegated yellowish brown, gray, and red sandy clay loam; very strongly acid

81—Tiak very fine sandy loam, 1 to 8 percent slopes

Map Unit Composition

Major components

Tiak and similar soils: 95 to 100 percent

Contrasting inclusions

Tiak soils: 0 to 5 percent

Antoine soils: 0 to 5 percent

Smithdale soils: 0 to 5 percent

Pikecity soils: 0 to 5 percent

Characteristics of the Tiak Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Upland clayey marine deposits

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: High (about 9.8 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 24 to 48 inches (apparent)

Runoff class: High

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 6 inches—yellowish brown gravelly very fine sandy loam; strongly acid

Subsoil:

6 to 19 inches—yellowish red silty clay; very strongly acid

19 to 27 inches—yellowish red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

27 to 40 inches—red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

40 to 72 inches—red clay that has yellowish brown masses of oxidized iron and gray iron depletions; very strongly acid

82—Tiak gravelly very fine sandy loam, 1 to 8 percent slopes

Map Unit Composition

Major components

Tiak and similar soils: 95 to 100 percent

Contrasting inclusions

Tiak soils: 0 to 5 percent

Antoine soils: 0 to 5 percent

Smithdale soils: 0 to 5 percent

Pikecity soils: 0 to 5 percent

Characteristics of the Tiak Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Upland clayey marine deposits

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: High (about 9.8 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 24 to 48 inches (apparent)

Runoff class: Medium

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 6 inches—yellowish brown gravelly very fine sandy loam; strongly acid

Subsoil:

6 to 19 inches—yellowish red silty clay; very strongly acid

19 to 27 inches—yellowish red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

27 to 40 inches—red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

40 to 72 inches—red clay that has yellowish brown masses of oxidized iron and gray iron depletions; very strongly acid

83—Tiak gravelly very fine sandy loam, 8 to 15 percent slopes

Map Unit Composition

Major components

Tiak and similar soils: 85 to 100 percent

Contrasting inclusions

Tiak soils: 0 to 5 percent

Antoine soils: 0 to 5 percent

Smithdale soils: 0 to 5 percent

Pikecity soils: 0 to 5 percent

Characteristics of the Tiak Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Upland clayey marine deposits

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: High (about 9.8 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 24 to 48 inches (apparent)

Runoff class: Very high

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 6 inches—yellowish brown gravelly very fine sandy loam; strongly acid

Subsoil:

6 to 19 inches—yellowish red silty clay; very strongly acid

19 to 27 inches—yellowish red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

27 to 40 inches—red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

40 to 72 inches—red clay that has yellowish brown masses of oxidized iron and gray iron depletions; very strongly acid

84—Tiak-Antoine complex, 1 to 8 percent slopes

Map Unit Composition

Major components

Tiak and similar soils: 40 to 60 percent

Antoine and similar soils: 30 to 50 percent

Contrasting inclusions

Nathan soils: 0 to 10 percent

Smithdale soils: 0 to 10 percent

Pikecity soils: 0 to 10 percent

Charcteristics of the Tiak Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Clayey marine deposits

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: High (about 9.8 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 24 to 48 inches (apparent)

Runoff class: Medium

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 6 inches—yellowish brown gravelly very fine sandy loam; strongly acid

Subsoil:

6 to 19 inches—yellowish red silty clay; very strongly acid

19 to 27 inches—yellowish red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

27 to 40 inches—red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

40 to 72 inches—red clay that has yellowish brown masses of oxidized iron and gray iron depletions; very strongly acid

Charcteristics of the Antoine Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Linear down the slope and convex across the slope

Parent material: Loamy marine deposits

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: High (about 10.4 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown silt loam; very strongly acid

Subsoil:

3 to 9 inches—yellowish brown silt loam; very strongly acid

9 to 23 inches—brownish yellow loam; very strongly acid
23 to 35 inches—yellowish red and light brownish gray loam; very strongly acid
35 to 47 inches—yellowish red and light brownish gray silt loam; very strongly acid
47 to 80 inches—light brownish gray clay loam; strongly acid

85—Tiak-Antoine complex, 8 to 15 percent slopes

Map Unit Composition

Major components

Tiak and similar soils: 40 to 60 percent

Antoine and similar soils: 30 to 50 percent

Contrasting inclusions

Peanutrock soils: 0 to 15 percent

Characteristics of the Tiak Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Clayey marine deposits

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: High (about 9.8 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 24 to 48 inches (apparent)

Runoff class: Very high

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 6 inches—yellowish brown gravelly very fine sandy loam; strongly acid

Subsoil:

6 to 19 inches—yellowish red silty clay; very strongly acid

19 to 27 inches—yellowish red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

27 to 40 inches—red clay that has yellowish brown masses of oxidized iron and light brownish gray iron depletions; very strongly acid

40 to 72 inches—red clay that has yellowish brown masses of oxidized iron and gray iron depletions; very strongly acid

Characteristics of the Antoine Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Interfluves

Shape of the slope: Concave down the slope and convex across the slope

Parent material: Loamy marine deposits

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: None
Drainage class: Moderately well drained
Permeability: Slow (about 0.42 micrometers/sec)
Available water capacity: High (about 10.4 inches)
Shrink-swell potential: High (about 7.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: Medium
Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown silt loam; very strongly acid

Subsoil:

3 to 9 inches—yellowish brown silt loam; very strongly acid

9 to 23 inches—brownish yellow loam; very strongly acid

23 to 35 inches—yellowish red and light brownish gray loam; very strongly acid

35 to 47 inches—yellowish red and light brownish gray silt loam; very strongly acid

47 to 80 inches—light brownish gray clay loam; strongly acid

86—Toine fine sandy loam, 0 to 2 percent slopes, rarely flooded

Map Unit Composition

Major components

Toine and similar soils: 85 to 95 percent

Contrasting inclusions

Gurdon soils: 0 to 10 percent

Characteristics of the Toine Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains; 135B—Cretaceous Western Coastal Plain

Landform: Flood plains (fig. 11)

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Fine-loamy alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 8.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Rare

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very low

Land capability classification, nonirrigated: 2e

Typical profile

Surface layer:

0 to 11 inches—brown fine sandy loam; moderately acid



Figure 11.—An area of Toine fine sandy loam, 0 to 2 percent slopes, rarely flooded. This soil is well suited to forage production and to most other agriculture uses.

Subsoil:

11 to 18 inches—dark yellowish brown loam; strongly acid

18 to 50 inches—strong brown loam; very strongly acid

50 to 69 inches—yellowish brown fine sandy loam; very strongly acid

***87—Toine fine sandy loam, 0 to 2 percent slopes,
occasionally flooded***

Map Unit Composition

Major components

Toine and similar soils: 85 to 95 percent

Contrasting inclusions

Gurdon soils: 0 to 10 percent

Characteristics of the Toine Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains; 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Fine-loamy alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: Moderate (about 8.2 inches)
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Flooding: Occasional
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: Very low
Land capability classification, nonirrigated: 2w

Typical profile

Surface layer:

0 to 11 inches—brown fine sandy loam; moderately acid

Subsoil:

11 to 18 inches—dark yellowish brown loam; strongly acid

18 to 50 inches—strong brown loam; very strongly acid

50 to 69 inches—yellowish brown fine sandy loam; very strongly acid

**88—Una silty clay loam, 0 to 2 percent slopes,
occasionally flooded**

Map Unit Composition

Major components

Una and similar soils: 95 to 100 percent

Contrasting inclusions

Marietta soils: 0 to 5 percent

Leeper soils: 0 to 5 percent

Characteristics of the Una Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Clayey alluvium

Slope: 0 to 2 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Poorly drained

Permeability: Very slow or impermeable (about 0.00 micrometers/sec)

Available water capacity: High (about 10.8 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: Occasional

Ponding: None

Seasonal water saturation: At a depth of about 6 to 12 inches (apparent)

Runoff class: Low

Land capability classification, nonirrigated: 3w

Typical profile

Surface layer:

0 to 4 inches—dark grayish brown silty clay loam that has yellowish red iron-manganese concretions and grayish brown iron depletions; slightly acid

Subsoil:

4 to 9 inches—yellowish brown loam; strongly acid

9 to 26 inches—yellowish brown and light brownish gray loam; strongly acid

26 to 35 inches—gray silty clay loam; very strongly acid
35 to 65 inches—light yellowish brown and gray silty clay loam; very strongly acid
65 to 82 inches—gray and strong brown clay loam that has red iron-manganese masses; very strongly acid

89—Vaughn gravelly loamy sand, 0 to 3 percent slopes, occasionally flooded

Map Unit Composition

Major components

Vaughn and similar soils: 85 to 95 percent

Contrasting inclusions

Pikecreek soils: 0 to 10 percent

Aquents soils: 0 to 5 percent

Characteristics of the Vaughn Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy alluvium

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Moderate (about 7.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Occasional

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 2w

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown gravelly loamy sand; moderately acid

Subsoil:

3 to 10 inches—yellowish brown gravelly sandy loam; strongly acid

10 to 27 inches—reddish yellow sandy loam; very strongly acid

27 to 44 inches—brown very gravelly loamy sand; strongly acid

90—Vaughn-Pikecreek complex, 0 to 3 percent slopes, frequently flooded

Map Unit Composition

Major components

Vaughn and similar soils: 45 to 65 percent

Pikecreek and similar soils: 25 to 45 percent

Contrasting inclusions

Ochlockonee soils: 5 to 15 percent

Characteristics of the Vaughn Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Loamy alluvium

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Moderate (about 7.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Frequent

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Low

Land capability classification, nonirrigated: 5w

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown gravelly sandy loam; moderately acid

Subsoil:

3 to 10 inches—yellowish brown gravelly sandy loam; strongly acid

10 to 27 inches—reddish yellow sandy loam; very strongly acid

27 to 44 inches—brown very gravelly loamy sand; strongly acid

Characteristics of the Pikecreek Soil

Soil properties and qualities

Major land resource area: 135B—Cretaceous Western Coastal Plain

Landform: Flood plains

Shape of the slope: Linear down the slope and linear across the slope

Parent material: Gravelly alluvium derived from sandstone

Slope: 0 to 3 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Rapid (about 42.34 micrometers/sec)

Available water capacity: Low (about 5.4 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: Frequent

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Negligible

Land capability classification, nonirrigated: 7w

Typical profile

Surface layer:

0 to 4 inches—brown very gravelly loamy sand; strongly acid

Substratum:

4 to 20 inches—strong brown extremely gravelly loamy sand; strongly acid

20 to 33 inches—extremely gravelly loamy coarse sand; strongly acid

33 to 80 inches—strong brown extremely cobbly loamy coarse sand; very strongly acid

91—Water

This map unit consists of reservoirs, ponds, and streams.

92—Wetsaw fine sandy loam, 1 to 6 percent slopes

Map Unit Composition

Major components

Wetsaw and similar soils: 85 to 100 percent

Contrasting inclusions

Avilla soils: 0 to 5 percent

Mazarn soils: 0 to 5 percent

Mena soils: 0 to 5 percent

Characteristics of the Wetsaw Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Stream terraces

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Loamy alluvium derived from sandstone and shale

Slope: 1 to 6 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Moderately well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Moderate (about 7.8 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: At a depth of about 18 to 30 inches (apparent)

Runoff class: High

Land capability classification, nonirrigated: 3e

Typical profile

Surface layer:

0 to 2 inches—dark brown fine sandy loam; slightly acid

Subsoil:

2 to 6 inches—strong brown fine sandy loam; moderately acid

6 to 18 inches—yellowish red loam; moderately acid

18 to 36 inches—yellowish red clay loam; moderately acid

36 to 72 inches—yellowish red, light brownish gray, and light yellowish brown silty clay loam; strongly acid

93—Woodall fine sandy loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Composition

Major components

Woodall and similar soils: 95 to 100 percent

Contrasting inclusions

Bonnerdale soils: 0 to 5 percent

Ceda soils: 0 to 5 percent

Dela soils: 0 to 5 percent
Kenn soils: 0 to 5 percent
Mazarn soils: 0 to 5 percent
Speer soils: 0 to 5 percent

Characteristics of the Woodall Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains
Landform: Flood plains
Shape of the slope: Linear down the slope and linear across the slope
Parent material: Loamy alluvium derived from sandstone
Slope: 0 to 2 percent (southeast aspect)
Surface fragments: None
Restrictive features: None
Drainage class: Poorly drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: High (about 9.6 inches)
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Flooding: Occasional
Ponding: None
Seasonal water saturation: At the surface to a depth of about 12 inches (apparent)
Runoff class: Very low
Land capability classification, nonirrigated: 3w

Typical profile

Surface layer:

0 to 4 inches—dark grayish brown fine sandy loam that has dark yellowish brown and yellowish brown masses of oxidized iron and iron-manganese concretions and light brownish gray iron depletions; strongly acid

Subsoil:

4 to 7 inches—grayish brown very fine sandy loam that has strong brown and yellowish brown masses of oxidized iron; strongly acid

7 to 19 inches—grayish brown very fine sandy loam that has yellowish brown and dark yellowish brown masses of oxidized iron; very strongly acid

19 to 35 inches—light brownish gray very fine sandy loam that has light yellowish brown, brownish yellow, and strong brown masses of oxidized iron and black manganese masses; very strongly acid

35 to 48 inches—light brownish gray loam that has light yellowish brown, yellowish brown, and brownish yellow masses of oxidized iron and black manganese masses; very strongly acid

48 to 57 inches—light brownish gray loam that has strong brown and yellowish brown masses of oxidized iron and very dark grayish brown iron-manganese masses; very strongly acid

57 to 80 inches—grayish brown loam that has black manganese coatings, yellowish brown masses of oxidized iron, and gray iron depletions; very strongly acid

94—Woodall fine sandy loam, 0 to 2 percent slopes, frequently flooded

Map Unit Composition

Major components

Woodall and similar soils: 85 to 95 percent

Contrasting inclusions

Bonnerdale soils: 0 to 5 percent

Ceda soils: 0 to 5 percent
Dela soils: 0 to 5 percent
Kenn soils: 0 to 5 percent
Mazarn soils: 0 to 5 percent
Speer soils: 0 to 5 percent

Characteristics of the Woodall Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains
Landform: Flood plains
Shape of the slope: Linear down the slope and linear across the slope
Parent material: Loamy alluvium derived from sandstone
Slope: 0 to 2 percent (southeast aspect)
Surface fragments: None
Restrictive features: None
Drainage class: Poorly drained
Permeability: Moderate (about 4.23 micrometers/sec)
Available water capacity: High (about 9.6 inches)
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Flooding: Frequent
Ponding: None
Seasonal water saturation: At the surface to a depth of about 12 inches (apparent)
Runoff class: Low
Land capability classification, nonirrigated: 5w

Typical profile

Surface layer:

0 to 4 inches—dark grayish brown fine sandy loam that has dark yellowish brown and yellowish brown masses of oxidized iron and iron-manganese concretions and light brownish gray iron depletions; strongly acid

Subsoil:

4 to 7 inches—grayish brown very fine sandy loam that has strong brown and yellowish brown masses of oxidized iron; strongly acid
7 to 19 inches—grayish brown very fine sandy loam that has yellowish brown and dark yellowish brown masses of oxidized iron; very strongly acid
19 to 35 inches—light brownish gray very fine sandy loam that has light yellowish brown, brownish yellow, and strong brown masses of oxidized iron and black manganese masses; very strongly acid
35 to 48 inches—light brownish gray loam that has light yellowish brown, yellowish brown, and brownish yellow masses of oxidized iron and black manganese masses; very strongly acid
48 to 57 inches—light brownish gray loam that has strong brown and yellowish brown masses of oxidized iron and very dark grayish brown iron-manganese masses; very strongly acid
57 to 80 inches—grayish brown loam that has black manganese coatings, yellowish brown masses of oxidized iron, and gray iron depletions; very strongly acid

95—Yanush very gravelly silt loam, 1 to 8 percent slopes

Map Unit Composition

Major components

Yanush and similar soils: 80 to 95 percent

Contrasting inclusions

Avilla soils: 5 to 15 percent

Characteristics of the Yanush Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Ridges and shoulders

Shape of the slope: Convex down the slope and concave across the slope

Parent material: Gravelly colluvium derived from novaculite

Slope: 1 to 8 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 6.4 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 4e

Typical profile

Surface layer:

0 to 5 inches—brown very gravelly silt loam; strongly acid

Subsurface layer:

5 to 12 inches—yellowish brown very gravelly silt loam; strongly acid

Subsoil:

12 to 19 inches—strong brown very gravelly silt loam; strongly acid

19 to 33 inches—yellowish red very gravelly silty clay loam; very strongly acid

33 to 80 inches—red very gravelly silty clay loam; very strongly acid

96—Yanush very gravelly silt loam, 8 to 15 percent slopes

Map Unit Composition

Major components

Yanush and similar soils: 85 to 95 percent

Contrasting inclusions

Bengal soils: 5 to 15 percent

Characteristics of the Yanush Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Parent material: Gravelly colluvium derived from novaculite

Slope: 8 to 15 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 6.4 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 6e

Typical profile

Surface layer:

0 to 5 inches—brown very gravelly silt loam; strongly acid

Subsurface layer:

5 to 12 inches—yellowish brown very gravelly silt loam; strongly acid

Subsoil:

12 to 19 inches—strong brown very gravelly silt loam; strongly acid

19 to 33 inches—yellowish red very gravelly silty clay loam; very strongly acid

33 to 80 inches—red very gravelly silty clay loam; very strongly acid

97—Yanush-Avant-Bengal complex, 15 to 35 percent slopes

Map Unit Composition

Major components

Yanush and similar soils: 45 to 55 percent

Avant and similar soils: 25 to 40 percent

Bengal and similar soils: 10 to 20 percent

Contrasting inclusions

Carnasaw soils: 0 to 20 percent

Characteristics of the Yanush Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly colluvium derived from chert and novaculite

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 6.4 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 5 inches—brown very gravelly silt loam; strongly acid

Subsurface layer:

5 to 12 inches—yellowish brown very gravelly silt loam; strongly acid

Subsoil:

12 to 19 inches—strong brown very gravelly silt loam; strongly acid

19 to 33 inches—yellowish red very gravelly silty clay loam; very strongly acid

33 to 80 inches—red very gravelly silty clay loam; very strongly acid

Characteristics of the Avant Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly colluvium derived from chert

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 3.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 4 inches—very dark grayish brown very cobbly silt loam; moderately acid

Subsurface layer:

4 to 10 inches—yellowish brown very gravelly silt loam; strongly acid

Subsoil:

10 to 16 inches—yellowish brown very gravelly silt loam; strongly acid

16 to 35 inches—strong brown very gravelly silty clay loam; very strongly acid

Bedrock:

35 to 40 inches—highly fractured, tilted and folded chert with thin strata of C material in the fractures; C material consists of thin strata of yellowish red and gray silty clay loam that is very strongly acid

Characteristics of the Bengal Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Loamy colluvium over clayey residuum that weathered from acid shale

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Low (about 5.6 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown cobbly silt loam; strongly acid

Subsurface layer:

3 to 6 inches—yellowish brown silt loam; strongly acid

Subsoil:

6 to 13 inches—strong brown silty clay loam; very strongly acid

13 to 31 inches—yellowish red silty clay; very strongly acid

31 to 37 inches—yellowish red channery silty clay; very strongly acid

Substratum:

37 to 40 inches—red and gray, soft, acid shale that is tilted and fractured

98—Yanush-Avant-Bengal complex, 35 to 60 percent slopes

Map Unit Composition

Major components

Yanush and similar soils: 45 to 55 percent

Avant and similar soils: 30 to 40 percent

Bengal and similar soils: 10 to 20 percent

Contrasting inclusions

Carnasaw soils: 0 to 15 percent

Characteristics of the Yanush Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly colluvium derived from chert and novaculite

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: None

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 6.4 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 5 inches—brown cobbly silt loam; strongly acid

Subsurface layer:

5 to 12 inches—yellowish brown very gravelly silt loam; strongly acid

Subsoil:

12 to 19 inches—strong brown very gravelly silt loam; strongly acid

19 to 33 inches—yellowish red very gravelly silty clay loam; very strongly acid

33 to 80 inches—red very gravelly silty clay loam; very strongly acid

Characteristics of the Avant Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly colluvium derived from chert

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 3.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 4 inches—very dark grayish brown very cobbly silt loam; moderately acid

Subsurface layer:

4 to 10 inches—yellowish brown very gravelly silt loam; strongly acid

Subsoil:

10 to 16 inches—yellowish brown very gravelly silt loam; strongly acid

16 to 35 inches—strong brown very gravelly silty clay loam; very strongly acid

Bedrock:

35 to 40 inches—highly fractured, tilted and folded chert with thin strata of C material in the fractures; C material consists of thin strata of yellowish red and gray silty clay loam that is very strongly acid

Characteristics of the Bengal Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Loamy colluvium over clayey residuum that weathered from acid shale

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: None

Restrictive features: Bedrock at a depth of 20 to 40 inches (paralithic)

Drainage class: Well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Low (about 5.7 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 3 inches—dark grayish brown very cobbly silt loam; strongly acid

Subsurface layer:

3 to 6 inches—yellowish brown silt loam; strongly acid

Subsoil:

6 to 13 inches—strong brown silty clay loam; very strongly acid

13 to 31 inches—yellowish red silty clay; very strongly acid

31 to 37 inches—yellowish red channery silty clay; very strongly acid

Substratum:

37 to 40 inches—red and gray, soft, acid shale that is tilted and fractured

**99—Yanush-Bigfork complex, 15 to 35 percent slopes,
extremely stony**

Map Unit Composition

Major components

Yanush and similar soils: 50 to 60 percent

Bigfork and similar soils: 30 to 45 percent

Contrasting inclusions

Bengal soils: 2 to 10 percent

Characteristics of the Yanush Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly colluvium derived from novaculite

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (angular)

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Moderate (about 6.4 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 5 inches—brown very gravelly silt loam; strongly acid

Subsurface layer:

5 to 12 inches—yellowish brown very gravelly silt loam; strongly acid

Subsoil:

12 to 19 inches—strong brown very gravelly silt loam; strongly acid

19 to 33 inches—yellowish red very gravelly silty clay loam; very strongly acid

33 to 80 inches—red very gravelly silty clay loam; very strongly acid

Characteristics of the Bigfork Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly residuum that weathered from novaculite

Slope: 15 to 35 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (angular)

Restrictive features: Bedrock at a depth of 20 to 50 inches (lithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Very low (about 2.3 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 3 inches—brown very cobbly loam; strongly acid

Subsurface layer:

3 to 7 inches—yellowish brown very cobbly loam; strongly acid

Subsoil:

7 to 25 inches—strong brown very cobbly silty clay loam; very strongly acid

Bedrock:

25 to 40 inches—hard novaculite bedrock that is tilted and fractured

100—Yanush-Bigfork complex, 35 to 60 percent slopes, rubbly

Map Unit Composition

Major components

Yanush and similar soils: 40 to 55 percent

Bigfork and similar soils: 25 to 35 percent

Contrasting inclusions

Bengal and similar soils: 0 to 10 percent

Rock outcrop: 5 to 10 percent

Characteristics of the Yanush Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly colluvium derived from novaculite

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (angular)

Restrictive features: None

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Soil Survey of Pike County, Arkansas

Available water capacity: Moderate (about 6.4 inches)
Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)
Flooding: None
Ponding: None
Seasonal water saturation: None within a depth of 6 feet
Runoff class: High
Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 5 inches—brown very stony silt loam; strongly acid

Subsurface layer:

5 to 12 inches—yellowish brown very gravelly silt loam; strongly acid

Subsoil:

12 to 19 inches—strong brown very gravelly silt loam; strongly acid

19 to 33 inches—yellowish red very gravelly silty clay loam; very strongly acid

33 to 80 inches—red very gravelly silty clay loam; very strongly acid

Characteristics of the Bigfork Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly residuum that weathered from novaculite

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (angular)

Restrictive features: Bedrock at a depth of 20 to 50 inches (lithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Very low (about 2.3 inches)

Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 3 inches—brown stony loam; strongly acid

Subsurface layer:

3 to 7 inches—yellowish brown very cobbly loam; strongly acid

Subsoil:

7 to 25 inches—strong brown very cobbly silty clay loam; very strongly acid

Bedrock:

25 to 40 inches—hard novaculite bedrock that is tilted and fractured

101—Zafra-Carnasaw-Clebit complex, 35 to 60 percent slopes, rubbly

Map Unit Composition

Major components

Zafra and similar soils: 25 to 50 percent

Carnasaw and similar soils: 20 to 40 percent

Clebit and similar soils: 15 to 25 percent

Contrasting inclusions

Rock outcrop: 5 to 15 percent

Characteristics of the Zafra Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly residuum that weathered from sandstone

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Restrictive features: Bedrock at a depth of 20 to 60 inches (paralithic)

Drainage class: Well drained

Permeability: Moderate (about 4.23 micrometers/sec)

Available water capacity: Low (about 4.1 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: High

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 2 inches—dark grayish brown very stony fine sandy loam; strongly acid

Subsurface layer:

2 to 5 inches—yellowish brown gravelly fine sandy loam; strongly acid

Subsoil:

5 to 9 inches—yellowish brown gravelly fine sandy loam; very strongly acid

9 to 14 inches—strong brown very gravelly loam; very strongly acid

14 to 26 inches—yellowish red very gravelly clay loam; very strongly acid

26 to 38 inches—strong brown very gravelly clay loam

Stratum:

38 to 42 inches—red, brown, and gray, soft, acid sandstone that is fractured and tilted

Characteristics of the Carnasaw Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Clayey residuum that weathered from shale and sandstone

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: About 15 to 50 percent (subangular)

Restrictive features: Bedrock at a depth of 40 to 60 inches (paralithic)

Drainage class: Well drained

Permeability: Slow (about 0.42 micrometers/sec)

Available water capacity: Moderate (about 7.1 inches)

Shrink-swell potential: High (about 7.5 percent linear extensibility)

Flooding: None

Soil Survey of Pike County, Arkansas

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Very high

Land capability classification, nonirrigated: 7e

Typical profile

Surface layer:

0 to 3 inches—brown stony fine sandy loam; strongly acid

Subsurface layer:

3 to 10 inches—yellowish brown cobbly fine sandy loam; very strongly acid

Subsoil:

10 to 40 inches—strong brown silty clay that has yellowish brown iron depletions; very strongly acid

40 to 58 inches—red and light yellowish brown silty clay that has light brownish gray iron depletions; very strongly acid

Substratum:

58 to 60 inches—fractured and tilted shale and interbedded sandstone and shale in shades of red, brown, yellow, and gray

Characteristics of the Clebit Soil

Soil properties and qualities

Major land resource area: 119—Ouachita Mountains

Landform: Side slopes

Shape of the slope: Convex down the slope and linear across the slope

Hillslope position: Backslopes

Parent material: Gravelly residuum that weathered from sandstone

Slope: 35 to 60 percent (southeast aspect)

Surface fragments: About 50 to 80 percent (subangular)

Restrictive features: Bedrock at a depth of 10 to 20 inches (lithic)

Drainage class: Well drained

Permeability: Moderately rapid (about 14.11 micrometers/sec)

Available water capacity: Very low (about 1.2 inches)

Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Flooding: None

Ponding: None

Seasonal water saturation: None within a depth of 6 feet

Runoff class: Medium

Land capability classification, nonirrigated: 7s

Typical profile

Surface layer:

0 to 4 inches—dark brown extremely stony fine sandy loam; strongly acid

Subsoil:

4 to 9 inches—dark yellowish brown very cobbly fine sandy loam; strongly acid

9 to 19 inches—brown very gravelly loam; very strongly acid

Bedrock:

19 to 40 inches—unweathered bedrock

Prime Farmland

Table 5 lists the map units in the survey area that are considered prime farmland. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

For some soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as rangeland and forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; for agricultural waste management; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of gravel, sand, reclamation material, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, and lawns.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited*, *somewhat limited*, and *very limited*. The suitability ratings are expressed as *well suited*, *moderately suited*, *poorly suited*, and *unsuited* or as *good*, *fair*, and *poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate

gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Crops and Pasture

Ralph Harris, conservation agronomist, Natural Resources Conservation Service, contributed to this section.

General management needed for pasture and hayland is suggested in this section. The pasture plants best suited to the soils, including some not commonly grown in the survey area, are identified; the system of land capability classification used by the Natural Resources Conservation Service is explained; and the estimated yields of the main pasture plants are listed for each soil. Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under "Detailed Soil Map Units." Specific information can be obtained from the local office of the Natural Resources Conservation Service.

Most of the cleared land in the county is used for pasture or hay crops (fig. 12). Some row crops are grown, but they are mostly in the form of gardens and truck patches, and the acreage is extremely limited. The soils that are well suited to row crops are mainly on flood plains and terraces along rivers and streams, and the small size of these areas makes production of most row crops impractical. Some of the gently sloping and moderately sloping soils on uplands are moderately suited to drilled or sown crops, mainly oats, wheat, and grain sorghum. Many of the soils on uplands are poorly suited or not suited to intensive use as cropland because of surface



Figure 12.—An area of Sherless-Littlefir-Nashoba complex, 8 to 15 percent slopes, in the foreground and middle ground and Bigfork-Yanush-Rock outcrop complex, 35 to 60 percent slopes, rubbly, in the background. Forage, poultry, and timber production are the leading sources of agriculture income in Pike County.

stoniness, slope, shallow depth to bedrock, a high content of coarse fragments, or a combination of these limitations.

In general, the soils of the county have a low content of nitrogen, potassium, phosphorus, calcium, and organic matter. The kinds and amounts of fertilizer applied should be based on soil tests, the productivity of the soil, expected yields, and past experience. Lime is typically necessary for satisfactory production of forage crops, such as bermudagrass and tall fescue, and very important for production of legumes. Pasture grasses respond well to nitrogen fertilizer. Because the soils have low natural fertility, forage plants respond well to applications of fertilizer.

Perennial grasses or mixtures of grasses and legumes are grown for pasture and hay. Mixtures generally consist of a suitable legume and either a warm-season perennial grass or a cool-season perennial grass. Bermudagrass, bahiagrass, and dallisgrass are the most common warm-season grasses. Bermudagrass is propagated by either sprigging or seeding, and bahiagrass and dallisgrass are propagated by seeding. Bermudagrass is generally sprigged because stands started by seeding are more susceptible to winter kill. White clover is the most commonly grown legume. Tall fescue is the most commonly grown cool-season grass. Cool-season annuals, such as rye, ryegrass, and wheat, are overseeded into warm-season pastures to extend the grazing season. These winter annuals should be planted on the better drained soils and fertilized at recommended rates to obtain the desired production levels.

Proper grazing is essential for the production of high quality forage, stand survival, and erosion control. Proper grazing helps plants maintain sufficient and generally vigorous top growth during the growing season. Rotational grazing is an important management tool that should be included in all pasture systems.

Yields per Acre

The average yields per acre that can be expected of the principal forage crops under a high level of management and fertility are shown in table 6. These yields are given in animal-unit-months. An animal-unit-month is defined as the amount of forage or feed required to feed one 1,000-pound animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days. An animal-unit-month can be converted to forage yield per acre by multiplying by 1,560. In other words, a field that is producing 1 animal-unit-month of forage per acre at a given fertility level would have a forage yield of approximately 1,560 pounds per acre. In any given year, yields may be higher or lower than those indicated in the table because of variation in rainfall and other climatic factors.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations are also considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include proper seeding rates and planting techniques; suitable high-yielding varieties; control of weeds; effective use of animal manure; optimum levels of nitrogen, phosphorus, potassium, pH, and trace elements for each crop; and harvesting that ensures the highest quality forage.

The estimated yields reflect the productive capacity of each soil for each of the principal pasture plants. Yields may increase as new production technology and new forage plant varieties are developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Pasture and hayland crops other than those shown in the table are grown in Pike County, but estimated yields are not listed because of the very limited acreage of such crops. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (USDA, 1961).

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e*, *w*, *s*, or *c*, to the class numeral, for example, 2*e*. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c*, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

The capability classification of the soils in this survey area is given in the section “Detailed Soil Map Units” and in the yields tables.

Forestland Productivity and Management

Nancy Young, forester, Natural Resources Conservation Service, and Ken Luckow, soil scientist, Forest Service, contributed to this section.

Forestland accounts for about 399,600 acres, or about 72 percent, of Pike County (fig. 13). About 28 percent (111,900 acres) has private non-industrial ownership, and about 20 percent (81,300 acres) has industrial ownership. Most of the remaining



Figure 13.—A stand of loblolly pine in an area of Sherless-Littlefir complex, 1 to 8 percent slopes. This map unit has moderately high potential for timber production.

acreage is publicly owned. As of September 30, 2007, there was 13,427 acres in the national forest system in Pike County. This land is administered by the district ranger at the Womble District office in Mount Ida.

Part of the Ouachita National Forest, which is managed by the USDA Forest Service, is in Pike County. The Ouachita National Forest, originally known as the Arkansas National Forest, was created by proclamation of President Theodore Roosevelt on December 18, 1907. It is the oldest national forest in the Southern Region (Region 8) of the Forest Service. The gross area within the proclamation boundary was originally 1,073,955 acres. From the date of proclamation until 1914, the forest was administered as part of the Forest Service District 3. The first local headquarters was at Fort Smith, Arkansas. In July 1908, the headquarters was moved to Mena, Arkansas. In June 1910, the headquarters was moved to its present location at Hot Springs, Arkansas. As of 2007, the Ouachita National Forest comprised 1,789,690 acres in Arkansas and Oklahoma.

Forest products contribute substantially to the economy of the county. Pike County has several timber-related industries that manufacture such products as log homes, posts, poles, pilings, treated lumber, crossties, pine lumber, hardwood lumber, flooring, paneling, staves, and pallet parts.

Soils vary in their ability to produce trees. Available water capacity and depth of the root zone have major effects on tree growth. Fertility and texture also influence tree growth. Elevation, aspect, and climate determine the kinds of trees that can grow on a site. Elevation and aspect are of particular importance in mountainous areas. This soil survey can be used by forestland managers planning ways to increase the productivity of forestland. Some soils respond better to applications of fertilizer than others, and some are more susceptible to landslides and erosion after roads are built and timber is harvested. Some soils require special reforestation efforts.

The tables described in this section can help forest owners or managers plan the use of soils for wood crops. They show the potential productivity of the soils for wood crops and rate the soils according to the limitations that affect various aspects of forestland management.

Forestland Productivity

In table 7, the *potential productivity* of merchantable or *common trees* on a soil is expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Forestland Management

In tables 8a through 8e, interpretive ratings are given for various aspects of forestland management. The ratings are both verbal and numerical.

Some rating class terms indicate the degree to which the soils are suited to a specified aspect of forestland management. *Well suited* indicates that the soil has features that are favorable for the specified management aspect and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for the specified management aspect. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for the specified management aspect. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. *Unsuited* indicates that the expected performance of the soil is unacceptable for the specified management aspect or that extreme measures are needed to overcome the undesirable soil properties.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified aspect of forestland management (1.00) and the point at which the soil feature is not a limitation (0.00).

Rating class terms for fire damage and seedling mortality are expressed as *low*, *moderate*, and *high*. Where these terms are used, the numerical ratings indicate gradations between the point at which the potential for fire damage or seedling mortality is highest (1.00) and the point at which the potential is lowest (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils. More detailed information about the criteria used in the ratings is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

Table 8a

For *limitations affecting construction of haul roads and log landings*, the ratings are based on slope, flooding, permafrost, plasticity index, the hazard of soil slippage, content of sand, the Unified classification, rock fragments on or below the surface, depth to a restrictive layer that is indurated, depth to a water table, and ponding. The limitations are described as slight, moderate, or severe. A rating of *slight* indicates that no significant limitations affect construction activities, *moderate* indicates that one or more limitations can cause some difficulty in construction, and *severe* indicates that one or more limitations can make construction very difficult or very costly.

The ratings of *suitability for log landings* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The soils are described as well suited, moderately suited, or poorly suited to use as log landings.

Ratings in the column *soil rutting hazard* are based on depth to a water table, rock fragments on or below the surface, the Unified classification, depth to a restrictive layer, and slope. Ruts form as a result of the operation of forest equipment. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that the soil is subject to little or no rutting, *moderate* indicates that rutting is likely, and *severe* indicates that ruts form readily.

Table 8b

Ratings in the column *hazard of off-road or off-trail erosion* are based on slope and on soil erodibility factor K. The soil loss is caused by sheet or rill erosion in off-road or off-trail areas where 50 to 75 percent of the surface has been exposed by logging, grazing, mining, or other kinds of disturbance. The hazard is described as slight, moderate, severe, or very severe. A rating of *slight* indicates that erosion is unlikely under ordinary climatic conditions; *moderate* indicates that some erosion is likely and that erosion-control measures may be needed; *severe* indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and *very severe* indicates that significant erosion is expected, loss of soil productivity and off-site damage are likely, and erosion-control measures are costly and generally impractical.

Ratings in the column *hazard of erosion on roads and trails* are based on the soil erodibility factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that little or no erosion is likely; *moderate* indicates that some erosion is likely, that the roads or trails may require occasional maintenance, and that simple erosion-control measures are needed; and *severe* indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

Ratings in the column *suitability for roads (natural surface)* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The ratings indicate the suitability for using the natural surface of the soil for roads. The soils are described as well suited, moderately suited, or poorly suited to this use.

Table 8c

Ratings in the columns *suitability for hand planting* and *suitability for mechanical planting* are based on slope, depth to a restrictive layer, content of sand, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, moderately suited, poorly suited, or unsuited to these methods of planting. It is assumed that necessary site preparation is completed before seedlings are planted.

Ratings in the column *suitability for use of harvesting equipment* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, and ponding. The soils are described as well suited, moderately suited, or poorly suited to this use.

Table 8d

Ratings in the column *suitability for mechanical site preparation (surface)* are based on slope, depth to a restrictive layer, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 1 foot is considered in the ratings.

Ratings in the column *suitability for mechanical site preparation (deep)* are based on slope, depth to a restrictive layer, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 3 feet is considered in the ratings.

Table 8e

Ratings in the column *potential for damage to soil by fire* are based on texture of the surface layer, content of rock fragments and organic matter in the surface layer, thickness of the surface layer, and slope. The soils are described as having a low, moderate, or high potential for this kind of damage. The ratings indicate an evaluation of the potential impact of prescribed fires or wildfires that are intense enough to remove the duff layer and consume organic matter in the surface layer.

Ratings in the column *potential for seedling mortality* are based on flooding, ponding, depth to a water table, content of lime, reaction, salinity, available water capacity, soil moisture regime, soil temperature regime, aspect, and slope. The soils are described as having a low, moderate, or high potential for seedling mortality.

Recreational Development

In tables 9a and 9b, the soils of the survey area are rated according to limitations that affect their suitability for recreational development (fig. 14). The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are



Figure 14.—An area of Sherless-Littlefir complex, 1 to 8 percent slopes, at Daisy State Park along the shore of Lake Greeson. This map unit is well-suited to picnic areas.

limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in these tables can be supplemented by other information in this survey, for example, interpretations for dwellings without basements, for local roads and streets, and for septic tank absorption fields.

Table 9a

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some

vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Table 9b

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a water table, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Wildlife Habitat

Paul Brady and James Baker, biologists, Natural Resources Conservation Service, contributed to this section.

Fish and wildlife habitats are abundant in the scenic countryside of Pike County. Land use in Pike County is dominated by the 399,600 acres of forestland, which represents about 72 percent of the county. Another 149,300 acres (about 26 percent of the land area) is pasture and hayland. Commercial cropland in the county consists of only about 80 to 100 acres of small grains. The oak-hickory forest type makes up about 43 percent of the forestland, the oak-pine type makes up about 37 percent, and the pine type makes up about 20 percent. Common bermudagrass and tall fescue are the major pasture grasses. Small amounts of bahiagrass, white clover, annual lespedeza, and hybrid bermudagrass are also grown.

Major plant groups and species that are important to wildlife in the county include oaks, hickories, dogwoods, hawthorns, shortleaf pine, loblolly pine, redcedar, blackberry, elderberry, viburnums, sumacs, greenbrier, honeysuckle, wheat, bahiagrass, bluestems, fescue, clover, annual lespedeza, panicums, partridge pea, common ragweed, tick clover, and vetches.

The abundant hardwood-and-evergreen forests, interspersed pastures, fencerows, and numerous vegetated edges provide abundant food and cover for white-tailed deer, wild turkey, squirrels, bobwhite quail, raccoons, coyotes, opossum, foxes, rabbits, owls, nongame birds, small mammals, reptiles, and other wildlife.

About 206,356 acres (37 percent) of the county is in the Ouachita Mountains. This area is managed by the USDA Forest Service and provides habitat and public hunting for deer, squirrels, wild turkeys, and other wildlife. Lowland habitat along streams and lakes in the county supports a variety of furbearers, including beaver, muskrat, mink, raccoon, gray fox, striped skunk, and coyote.

Pike County has approximately 3,000 ponds covering an estimated 1,000 acres. The ponds are used primarily for livestock watering and for sportfishing of largemouth bass, bluegill, redear sunfish, and channel catfish. The lakes in the county cover about 9,278 surface acres. Lake Greeson is the primary lake. This lake, and other smaller bodies of water, provide habitat and sportfishing for largemouth bass, bluegill, channel catfish, and other species. Fishable streams in the county include the Caddo, Little Missouri, and Antoine Rivers.

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

Tables 10a through 10c show the degree and kind of soil limitations that affect various kinds of habitat for wildlife. The tables show limitations of the soils for grain and seed crops for food and cover; domestic grasses and legumes for food and cover; upland shrubs and vines; upland deciduous trees; upland coniferous trees; upland mixed deciduous and coniferous trees; riparian herbaceous plants; riparian shrubs, vines, and trees; freshwater wetland plants; and irrigated freshwater wetland plants. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting areas for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the element or kind of habitat. *Not limited* indicates that the soil has features that are very favorable

for the element or kind of habitat. Good performance and very low maintenance can be expected. *Slightly limited* indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Creating, improving, or maintaining habitat is impractical or impossible.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Table 10a

Ratings for *grain and seed crops for food and cover* can be used in the selection of sites that have the soil properties and plant species necessary to sustain wildlife habitat. The ratings do not reflect limitations for commercial agronomic production. The soil properties and features that affect the growth of grain and seed crops are soil texture, content of organic matter, the amount of rock fragments on or near the soil surface, available water capacity, depth to bedrock or a cemented pan, soil moisture, soil temperature, depth to a high water table, ponding, flooding, permeability of the surface layer, slope, content of salts, and susceptibility of the soil to water erosion and wind erosion. Examples of grain and seed crops are corn, wheat, and oats.

Ratings for *domestic grasses and legumes for food and cover* can be used in the selection of sites that have the soil properties and plant species necessary to sustain wildlife habitat. The ratings do not reflect limitations for commercial agronomic production. The soil properties and features that affect the growth of grasses and legumes are soil texture, content of organic matter, the amount of rock fragments on or near the soil surface, available water capacity, depth to bedrock or a cemented pan, soil moisture, soil temperature, depth to a high water table, ponding, flooding, permeability of the surface layer, slope, content of salts, and susceptibility of the soil to water erosion and wind erosion. Examples of grasses and legumes are fescue, lovegrass, bahiagrass, clover, and vetch.

The column *upland shrubs and vines* shows ratings of the soils as a growth medium for a diverse upland shrub and vine community. This community is adapted to soils that are drier than those common in the moist riparian and wetland zones but that are not as dry as those in upland desert areas. The soil properties and features that affect the ability of the adapted species to thrive include soil texture, content of organic matter, available water capacity, depth to bedrock or a cemented pan, content of salts, soil moisture, soil temperature, depth to a high water table, and rock fragments on the surface. Examples of shrubs are American beautyberry, yaupon, sumac, and greenbrier.

Table 10b

The column *upland deciduous trees* shows ratings of the soils as a growth medium for a diverse upland deciduous tree community that meets specific local habitat requirements for targeted and nontargeted wildlife species. Typically, deciduous trees require better soil conditions than geographically related conifers. The soil properties and features that affect the ability of upland deciduous trees to thrive include available water capacity, depth to a high water table, depth to bedrock or a cemented pan, soil moisture, and soil temperature. Examples of upland deciduous trees are oak, poplar, cherry, sweetgum, apple, hawthorn, dogwood, hickory, blackberry, and blueberry.

The column *upland coniferous trees* shows ratings of the soils as a growth medium for a diverse upland coniferous tree community that meets specific local habitat requirements for targeted and nontargeted wildlife species. Typically, coniferous trees can subsist under harsher soil conditions than geographically related hardwoods. The soil properties and features that affect the ability of upland coniferous trees to thrive include available water capacity, depth to a high water table, depth to bedrock or a cemented pan, soil moisture, and soil temperature. Examples of upland coniferous trees are pine and eastern redcedar.

The column *upland mixed deciduous and coniferous trees* shows ratings of the soils as a growth medium for a diverse upland deciduous-coniferous tree community that meets specific local habitat requirements for targeted and nontargeted wildlife species. A mixed deciduous-coniferous forest can subsist under a wide variety of soil conditions. Typically, better soil conditions are required to maintain the deciduous species, but many of these species adapt to harsher conditions. The soil properties and features that affect the ability of the deciduous and coniferous trees to thrive include available water capacity, depth to a high water table, seasonal duration of a high water table, depth to bedrock or a cemented pan, soil moisture, and soil temperature.

Table 10c

The column *riparian herbaceous plants* shows ratings of the soils as a growth medium for herbaceous plants that are adapted to soil conditions that are wetter than those common in the drier upland areas. The soils suitable for this habitat generally are on flood plains, in depressions, on bottom land, in drainageways adjacent to streams, or in other areas where the soils are either saturated for some period during the year or are subject to periodic overflow from ponding or flooding. The soil properties and features that affect the ability of riparian herbaceous plants to persist include soil texture, content of organic matter, depth to a high water table, frequency and duration of ponding and flooding, content of salts, rock fragments, and soil temperature. Examples of wild herbaceous plants are bluestem, goldenrod, beggarweed, croton, and partridge pea.

The column *riparian shrubs, vines, and trees* shows ratings of the soils as a growth medium for shrubs, vines, and trees that are adapted to soil conditions that are wetter than those common in the drier upland areas. The soils suitable for this habitat generally are on flood plains, in depressions, on bottom land, in drainageways adjacent to streams, in areas of springs and seeps, or in other areas where the soils are either saturated for some period during the year or are subject to periodic overflow from ponding or flooding. The soil properties and features that affect the ability of riparian shrubs, vines, and trees to persist include available water capacity, depth to a high water table, frequency and duration of ponding and flooding, content of salts, and soil temperature. Examples of riparian shrubs, vines, and trees are cottonwood and willow.

The column *freshwater wetland plants* shows ratings of the soils as a growth medium for plants that are adapted to wet soil conditions. The soils suitable for this habitat generally are in marshes, in depressions, on bottom land, in backwater areas on flood plains, in drainageways adjacent to streams, in areas of springs and seeps, or in other areas where the soils are not directly affected by moving floodwater but may be ponded during some part of the year. The soil properties and features that affect the ability of freshwater wetland plants to persist include soil texture, content of organic matter, depth to a high water table, frequency and duration of ponding, content of salts, and soil reaction (pH). Examples of shallow water areas are marshes, waterfowl feeding areas, and beaver ponds.

Irrigated freshwater wetland plants are grasses, forbs, and shrubs that are adapted to wet soil conditions. The soils suitable for this habitat generally occur in areas of cropland, previously cropped areas, and marginal areas associated with cropland and

wetlands. These areas may be ponded for some period during the year. These areas are generally suitable for the temporary or permanent restoration of wetland features. Soil properties and features affecting irrigated freshwater wetland plants are surface texture, permeability, wetness, ponding, and soil reaction.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, water management, and agricultural waste management. The ratings are based on observed performance of the soils and on the data in the tables described under the heading "Soil Properties."

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, reclamation material, roadfill, and topsoil; plan structures for water management; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 11a and 11b show the degree and kind of soil limitations that

affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Table 11a

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Table 11b

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented

pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Sanitary Facilities

Tables 12a and 12b show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Table 12a

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may

not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

Table 12b

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil

properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Tables 13a and 13b give information about the soils as potential sources of gravel, sand, reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

Table 13a

Gravel and *sand* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In the table, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of gravel or sand are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains gravel or sand, the soil is considered a likely source regardless of thickness. The assumption is that the gravel or sand layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good*, *fair*, or *poor* as potential sources of gravel and sand. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of gravel or sand. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

Table 13b

In table 13b, the rating class terms are *good*, *fair*, and *poor*. The features that limit the soils as sources of these materials are specified in the tables. The numerical

ratings given after the specified features indicate the degree to which the features limit the soils as sources of reclamation material, roadfill, and topsoil. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Water Management

Table 14 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or

expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Agricultural Waste Management

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage.

Tables 15a through 15c show the degree and kind of soil limitations affecting the treatment of agricultural waste, including municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it has a high content of sodium and chloride. In the context of these tables, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste.

Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly has a very low content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because

the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

The ratings in the tables are for waste management systems that not only dispose of and treat organic waste or wastewater but also are beneficial to crops (application of manure and food-processing waste, application of sewage sludge, and disposal of wastewater by irrigation) and for waste management systems that are designed only for the purpose of wastewater disposal and treatment (overland flow of wastewater, rapid infiltration of wastewater, and slow-rate treatment of wastewater).

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect agricultural waste management. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Table 15a

Application of manure and food-processing waste not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. Manure is the excrement of livestock and poultry, and food-processing waste is damaged fruit and vegetables and the peelings, stems, leaves, pits, and soil particles removed in food preparation. The manure and food-processing waste are either solid, slurry, or liquid. Their nitrogen content varies. A high content of nitrogen limits the application rate. Toxic or otherwise dangerous wastes, such as those mixed with the lye used in food processing, are not considered in the ratings.

The ratings for application of manure and food-processing waste are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include permeability, depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of sewage sludge not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. In the context of this table, sewage sludge is the residual product of the treatment of municipal sewage. The solid component consists mainly of cell mass, primarily bacteria cells that developed during secondary treatment and have incorporated soluble organics into their own bodies. The sludge has small amounts of sand, silt, and other solid debris. The content of nitrogen varies. Some sludge has

constituents that are toxic to plants or hazardous to the food chain, such as heavy metals and exotic organic compounds, and should be analyzed chemically prior to use.

The content of water in the sludge ranges from about 98 percent to less than 40 percent. The sludge is considered liquid if it is more than about 90 percent water, slurry if it is about 50 to 90 percent water, and solid if it is less than about 50 percent water.

The ratings for application of sewage sludge are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the sludge is applied, and the method by which the sludge is applied. The properties that affect absorption, plant growth, and microbial activity include permeability, depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, available water capacity, reaction, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of sludge. Permanently frozen soils are unsuitable for waste treatment.

Table 15b

Disposal of wastewater by irrigation not only disposes of municipal wastewater and wastewater from food-processing plants, lagoons, and storage ponds but also can improve crop production by increasing the amount of water available to crops. The ratings are based on the soil properties that affect the design, construction, management, and performance of the irrigation system. The properties that affect design and management include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, permeability, slope, and flooding. The properties that affect construction include stones, cobbles, depth to bedrock or a cemented pan, depth to a water table, and ponding. The properties that affect performance include depth to bedrock or a cemented pan, bulk density, the sodium adsorption ratio, salinity, reaction, and the cation-exchange capacity, which is used to estimate the capacity of a soil to adsorb heavy metals. Permanently frozen soils are not suitable for disposal of wastewater by irrigation.

Overland flow of wastewater is a process in which wastewater is applied to the upper reaches of sloped land and allowed to flow across vegetated surfaces, sometimes called terraces, to runoff-collection ditches. The length of the run generally is 150 to 300 feet. The application rate ranges from 2.5 to 16.0 inches per week. It commonly exceeds the rate needed for irrigation of cropland. The wastewater leaves solids and nutrients on the vegetated surfaces as it flows downslope in a thin film. Most of the water reaches the collection ditch, some is lost through evapotranspiration, and a small amount may percolate to the ground water.

The ratings for overland flow of wastewater are based on the soil properties that affect absorption, plant growth, microbial activity, and the design and construction of the system. Reaction and the cation-exchange capacity affect absorption. Reaction, salinity, and the sodium adsorption ratio affect plant growth and microbial activity. Slope, permeability, depth to a water table, ponding, flooding, depth to bedrock or a cemented pan, stones, and cobbles affect design and construction. Permanently frozen soils are unsuitable for waste treatment.

Table 15c

Rapid infiltration of wastewater is a process in which wastewater applied in a level basin at a rate of 4 to 120 inches per week percolates through the soil. The wastewater may eventually reach the ground water. The application rate commonly exceeds the rate needed for irrigation of cropland. Vegetation is not a necessary part of the treatment; hence, the basins may or may not be vegetated. The thickness of the soil material needed for proper treatment of the wastewater is more than 72 inches. As

a result, geologic and hydrologic investigation is needed to ensure proper design and performance and to determine the risk of ground-water pollution.

The ratings for rapid infiltration of wastewater are based on the soil properties that affect the risk of pollution and the design, construction, and performance of the system. Depth to a water table, ponding, flooding, and depth to bedrock or a cemented pan affect the risk of pollution and the design and construction of the system. Slope, stones, and cobbles also affect design and construction. Permeability and reaction affect performance. Permanently frozen soils are unsuitable for waste treatment.

Slow-rate treatment of wastewater is a process in which wastewater is applied to land at a rate normally between 0.5 inch and 4.0 inches per week. The application rate commonly exceeds the rate needed for irrigation of cropland. The applied wastewater is treated as it moves through the soil. Much of the treated water may percolate to the ground water, and some enters the atmosphere through evapotranspiration. The applied water generally is not allowed to run off the surface. Waterlogging is prevented either through control of the application rate or through the use of tile drains, or both.

The ratings for slow-rate treatment of wastewater are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, and the application of waste. The properties that affect absorption include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, permeability, depth to bedrock or a cemented pan, reaction, the cation-exchange capacity, and slope. Reaction, the sodium adsorption ratio, salinity, and bulk density affect plant growth and microbial activity. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood of wind erosion or water erosion. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are determined by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering properties, physical and chemical properties, and pertinent soil and water features.

Engineering Properties

Table 16 gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement,

the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an oven-dry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

Physical Soil Properties

Table 17 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In the table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In the table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In the table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $1/3$ - or $1/10$ -bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water

and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability, as used in soil surveys, indicates saturated hydraulic conductivity (Ksat). The estimates in the table indicate the rate of water movement, in micrometers per second, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $1/3$ - or $1/10$ -bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is *low* if the soil has a linear extensibility of less than 3 percent; *moderate* if 3 to 6 percent; *high* if 6 to 9 percent; and *very high* if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In the table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1

are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Soil Properties

Table 18 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced permeability and aeration, and a general degradation of soil structure.

Soil Features

Table 19 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness of the restrictive layer, which significantly affects the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture

moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low*, *moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Water Features

Table 20 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. The table indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2003). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Ultisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Udult (*Ud*, meaning humid, plus *ult*, from Ultisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Hapludults (*Hapl*, meaning minimal horizonation, plus *udult*, the suborder of the Ultisols that has a udic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great group. An example is Typic Hapludults.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, siliceous, semiactive, thermic Typic Hapludults.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. An example is the Pirum series.

Table 21 indicates the order, suborder, great group, subgroup, and family of the soil series in the survey area.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the "Soil Survey Manual" (Soil Survey Division Staff, 1993) and in the "Field Book for Describing and Sampling Soils" (Schoeneberger and others, 2002). Many of the technical terms used in the descriptions are defined in "Soil Taxonomy" (Soil Survey Staff, 1999) and in "Keys to Soil Taxonomy" (Soil Survey Staff, 2003). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the series.

Antoine Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Interfluves

Position on the landscape: Linear areas on crests and interfluves and linear-convex areas on backslopes

Parent material: Loamy marine deposits

Geology: Brownstown Marl

Drainage class: Moderately well drained

Permeability: Slow

Soil depth class: Very deep

Shrink-swell potential: High

Slope: 1 to 15 percent

Taxonomic classification: Fine-silty, mixed, semiactive, thermic Aquic Paleudults

Associated Soils

The Antoine series is commonly associated with McCaskill, Nathan, Peanutrock, Pikecity, Stelltown, and Tiak soils.

Typical Pedon

Antoine loam, 1 to 6 percent slopes; in a forested area; NW¹/₄SE¹/₄NW¹/₄ sec. 7, T. 9 S., R. 23 W.; Pike County, Arkansas; Piney Grove USGS topographic quadrangle; lat. 33 degrees 58 minutes 55.00 seconds N. and long. 93 degrees 29 minutes 40.00 seconds W.

A—0 to 3 inches; dark grayish brown (10YR 4/2) loam; weak medium granular structure; friable; very strongly acid; clear smooth boundary.

Bt1—3 to 9 inches; yellowish brown (10YR 5/6) loam; weak medium subangular blocky structure; friable; few distinct clay films on faces of peds; very strongly acid; clear smooth boundary.

Bt2—9 to 23 inches; brownish yellow (10YR 6/6) loam; weak and moderate medium subangular blocky structure; friable; 10 percent medium prominent light brownish gray (10YR 6/2) iron depletions; few distinct clay films of faces of peds; very strongly acid; gradual wavy boundary.

Bt3—23 to 35 inches; light brownish gray (10YR 6/2) and yellowish red (5YR 5/8) loam; moderate medium subangular blocky structure; friable; common distinct clay films on faces of peds and lining pores; very strongly acid; gradual wavy boundary.

Bt4—35 to 47 inches; yellowish red (5YR 5/8) and light brownish gray (10YR 6/2) silt loam; moderate medium subangular blocky structure; friable; common distinct clay films on faces of peds and lining pores; very strongly acid; gradual wavy boundary.

Bt5—47 to 80 inches; light brownish gray (10YR 6/2) clay loam; moderate medium subangular blocky structure; firm; 25 percent coarse prominent yellowish red

(5YR 5/8) masses of oxidized iron; common distinct clay films on faces of peds and lining pores; strongly acid.

Range in Characteristics

The thickness of the solum ranges from 60 to more than 80 inches. The content of gravel ranges from 0 to 5 percent throughout.

A horizon:

Color—hue of 10YR, value of 3 to 5, and chroma of 2 to 4

Texture—loam

Reaction—strongly acid or very strongly acid

E horizon (where present):

Color—hue of 10YR, value of 5 or 6, and chroma of 4 to 6

Texture—loam, silt loam, fine sandy loam, or very fine sandy loam

Reaction—slightly acid to very strongly acid

Upper part of the Bt horizon:

Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 6 to 8; or variegated in shades of red, gray, and brown

Redoximorphic features (where present)—few or common in shades of gray, red, or brown

Texture—silt loam, loam, or silty clay loam

Reaction—moderately acid to very strongly acid

Lower part of the Bt horizon:

Color—hue of 7.5YR or 10YR, value of 5, and chroma of 6 to 8; or variegated in shades of gray, brown, and red

Redoximorphic features—shades of gray, brown, or red. In some pedons, this horizon has few weakly cemented black iron-manganese nodules.

Texture—silty clay loam, silty clay, or clay

Reaction—strongly acid or very strongly acid

Btg horizon (where present):

Color—hue of 10YR, value of 5 or 6, and chroma of 1 or 2; or variegated in shades of gray, brown, red, and yellow

Redoximorphic features—shades of gray, brown, and red. In some pedons, this horizon has few weakly cemented black iron-manganese nodules.

Texture—silty clay loam, silty clay, clay loam, or clay

Reaction—strongly acid or very strongly acid

Avant Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Mountainsides

Position on the landscape: Linear-convex areas on backslopes

Parent material: Gravelly colluvium derived from chert

Geology: Bigfork Chert

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Moderately deep to paralithic bedrock

Shrink-swell potential: Low

Slope: 15 to 60 percent

Taxonomic classification: Loamy-skeletal, siliceous, semiactive, thermic Typic Hapludults

Associated Soils

The Avant series is commonly associated with Bengal, Bigfork, Carnasaw, and Yanush soils.

Typical Pedon

Avant very cobbly silt loam in a forested area of Yanush-Avant-Bengal complex, 35 to 60 percent slopes; NW¹/₄NW¹/₄SE¹/₄ sec. 1, T. 5 S., R. 27 W.; Pike County, Arkansas; Langley USGS topographic quadrangle; lat. 34 degrees 20 minutes 25.29 seconds N. and long. 93 degrees 50 minutes 20.32 seconds W.

- A—0 to 4 inches; very dark grayish brown (10YR 3/2) very cobbly silt loam; moderate fine granular structure; friable; 40 percent angular strongly cemented fragments of chert; moderately acid; clear smooth boundary.
- E—4 to 10 inches; yellowish brown (10YR 5/4) very gravelly silt loam; weak medium granular structure; friable; 50 percent angular strongly cemented fragments of chert; strongly acid; clear smooth boundary.
- BE—10 to 16 inches; yellowish brown (10YR 5/6) very gravelly silt loam; weak fine subangular blocky structure; friable; 40 percent angular strongly cemented fragments of chert; strongly acid; clear smooth boundary.
- Bt—16 to 35 inches; strong brown (7.5YR 5/6) very gravelly silty clay loam; moderate medium subangular blocky structure; firm; 30 percent discontinuous faint clay films on bottom faces of peds; 50 percent angular strongly cemented fragments of chert; very strongly acid; abrupt irregular boundary.
- R/C—35 to 40 inches; highly fractured, tilted and folded chert with thin strata of C material in the fractures; C material consisting of thin strata of very strongly acid, yellowish red (5YR 5/8) and gray (10YR 6/1) silty clay loam.

Range in Characteristics

The thickness of the solum and depth to fractured, rippable chert bedrock range from 20 to 40 inches. They are extremely variable within short distances due to the irregular boundary between the Bt horizon and the underlying tilted bedrock. Reaction ranges from moderately acid to very strongly acid throughout. The content of chert fragments ranges from 35 to 90 percent, by volume, throughout.

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 or 3; or hue of 7.5YR, value of 4, and chroma of 2 to 4. Where moist value is 3 and chroma is 2 or 3, the horizon is less than 6 inches thick.

Texture—very cobbly silt loam

E horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4

Texture—very gravelly, extremely gravelly, very cobbly, or extremely cobbly analogs of loam or silt loam

BE horizon:

Color—hue of 7.5YR or 10YR, value of 5, and chroma of 4 to 8

Texture—very gravelly, extremely gravelly, very cobbly, or extremely cobbly analogs of loam or silt loam

Bt horizon:

Color—hue of 5YR to 10YR, value of 5 or 6, and chroma of 4 to 8; or hue of 5YR, value of 4, and chroma of 4 to 8

Texture—very gravelly, extremely gravelly, very cobbly, or extremely cobbly analogs of loam, silt loam, silty clay loam, or clay loam

R/C horizon:

This horizon consists of alternating strata of highly fractured, hard chert bedrock and fine-earth material with a dip ranging from 30 degrees to near vertical. The R material is typically highly fractured, hard chert bedrock. Horizontal spacing between fractures is typically 10 centimeters or more. Due to the fractured nature of the chert bedrock, excavation can normally be made with common construction equipment. The C material has stratified textures ranging from clay to very fine sandy loam and colors in shades of brown, gray, red, or yellow. Because of faulting and folding, this horizon is extremely variable within short distances.

Avilla Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Stream terraces

Position on the landscape: Linear areas on treads and linear-convex areas on risers

Parent material: Loamy alluvium derived from sandstone and shale

Geology: Stanley Shale

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 1 to 12 percent

Taxonomic classification: Fine-loamy, siliceous, semiactive, thermic Typic Paleudults

Associated Soils

The Avilla series is commonly associated with Kenn, Speer, and Wetsaw soils.

Typical Pedon

Avilla fine sandy loam, 1 to 6 percent slopes; in a pasture; NW¹/₄NE¹/₄SW¹/₄ sec. 13, T. 5 S., R. 27 W.; Pike County, Arkansas; Langley USGS topographic quadrangle; lat. 34 degrees 18 minutes 38.43 seconds N. and long. 93 degrees 50 minutes 40.11 seconds W.

Ap—0 to 4 inches; brown (7.5YR 4/4) fine sandy loam; weak fine granular structure; friable; common fine roots throughout; common fine moderate-continuity irregular pores; moderately acid; abrupt smooth boundary.

BA—4 to 9 inches; strong brown (7.5YR 4/6) loam; weak fine subangular blocky structure; friable; common fine roots throughout; common fine low-continuity irregular pores; strongly acid; clear smooth boundary.

Bt1—9 to 16 inches; yellowish red (5YR 5/8) loam; weak medium subangular blocky structure; friable; common fine roots throughout; common fine low-continuity tubular pores; 15 percent patchy faint yellowish red (5YR 5/6) clay films on top faces of peds; strongly acid; clear smooth boundary.

Bt2—16 to 34 inches; yellowish red (5YR 5/8) clay loam; moderate medium subangular blocky structure; firm; common fine moderate-continuity tubular pores; 35 percent discontinuous faint yellowish red (5YR 5/6) clay films on faces of peds; strongly acid; clear smooth boundary.

Bt3—34 to 44 inches; yellowish red (5YR 5/8) gravelly clay loam; moderate medium subangular blocky structure; firm; common fine low-continuity irregular pores; 40 percent discontinuous faint yellowish red (5YR 5/6) clay films on faces of peds; 15 percent subrounded fragments of sandstone; strongly acid; gradual smooth boundary.

BC—44 to 61 inches; yellowish red (5YR 5/8), light brownish gray (10YR 6/2), and yellowish brown (10YR 5/8) gravelly clay loam; moderate medium subangular blocky structure; firm; common fine low-continuity irregular pores; 25 percent nonflat subrounded fragments of sandstone; very strongly acid.

Range in Characteristics

The content of sandstone rock fragments less than 10 inches in diameter ranges from 15 to 60 percent. Reaction ranges from strongly acid to extremely acid throughout. The thickness of the solum and depth to bedrock range from 60 to more than 80 inches.

A or Ap horizon:

Color—hue of 10YR, value of 4, and chroma of 3 or 4; or hue of 7.5YR, value of 4, and chroma of 4

Texture—fine sandy loam or gravelly fine sandy loam

Rock fragments—0 to 25 percent sandstone fragments less than 3 inches in diameter

Reaction—moderately acid or strongly acid, except where amendments have been applied

E horizon (where present):

Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4

Texture—fine sandy loam or very fine sandy loam

Rock fragments—0 to 15 percent sandstone fragments less than 3 inches in diameter

Reaction—strongly acid or very strongly acid, except where amendments have been applied

BA horizon:

Color—hue of 7.5YR, value of 5, and chroma of 4 to 8; or hue of 7.5YR, value of 4, and chroma of 4 to 6

Texture—clay loam, loam, or sandy clay loam

Rock fragments—0 to 15 percent sandstone fragments less than 3 inches in diameter

Reaction—strongly acid or very strongly acid

Bt1 horizon:

Color—hue of 5YR or 7.5YR, value of 5, and chroma of 6 to 8

Texture—clay loam, loam, or sandy clay loam

Rock fragments—0 to 15 percent sandstone fragments less than 3 inches in diameter

Reaction—strongly acid or very strongly acid

Bt2 horizon:

Color—hue of 2.5YR, value of 4, and chroma of 6 to 8; or hue of 5YR or 7.5YR, value of 5, and chroma of 6 to 8

Texture—clay loam, sandy clay loam, or their gravelly analogs

Rock fragments—0 to 35 percent sandstone fragments less than 3 inches in diameter

Reaction—strongly acid or very strongly acid

Bt3 horizon:

Color—hue of 2.5YR, value of 4, and chroma of 6 to 8; or hue of 5YR, value of 5, and chroma of 6 to 8

Texture—clay loam, sandy clay loam, or their gravelly analogs

Rock fragments—0 to 35 percent sandstone fragments less than 3 inches in diameter

Reaction—strongly acid or very strongly acid

Bt4 horizon (where present):

Color—hue of 2.5YR, value of 4, and chroma of 6 to 8; or hue of 5YR, value of 5, and chroma of 6 to 8

Texture—gravelly clay loam, gravelly sandy clay loam, very gravelly clay loam, or very gravelly sandy clay loam

BC horizon:

Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 4 to 8; or variegated in shades of brown, gray, or red

Redoximorphic features—shades of red, brown, yellow, or gray

Texture—gravelly clay loam, gravelly sandy clay loam, gravelly loam, very gravelly clay loam, very gravelly sandy clay loam, or very gravelly loam

Bengal Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Hillsides and mountainsides

Position on the landscape: Linear-convex areas on backslopes

Parent material: Loamy colluvium over clayey residuum weathered from acid shale

Geology: Arkansas Novaculite and Stanley Shale

Drainage class: Well drained

Permeability: Slow

Soil depth class: Moderately deep to paralithic bedrock

Shrink-swell potential: High

Slope: 8 to 60 percent

Taxonomic classification: Fine, mixed, semiactive, thermic Typic Hapludults

Associated Soils

The Bengal series is commonly associated with Avant, Bigfork, Bismarck, Carnasaw, Littlefir, and Yanush soils.

Typical Pedon

Bengal cobbly silt loam (fig. 15) in a forested area of Bengal-Bismarck-Yanush complex, 15 to 35 percent slopes, extremely stony; SW¹/₄NW¹/₄NW¹/₄ sec. 2, T. 5 S., R. 25 W.; Pike County, Arkansas; Lodi USGS topographic quadrangle; lat. 34 degrees 20 minutes 28.65 seconds N. and long. 93 degrees 39 minutes 12.34 seconds W.

A—0 to 3 inches; dark grayish brown (10YR 4/2) cobbly silt loam; weak fine granular structure; friable; many medium roots throughout; common fine low-continuity irregular pores; 15 percent subangular very strongly cemented fragments of sandstone; strongly acid; clear smooth boundary.

E—3 to 6 inches; yellowish brown (10YR 5/4) silt loam; weak fine subangular blocky structure; friable; common medium roots throughout; common fine low-continuity irregular pores; 10 percent subangular very strongly cemented fragments of sandstone; strongly acid; gradual smooth boundary.

Bt1—6 to 13 inches; strong brown (7.5YR 5/8) silty clay loam; moderate medium subangular blocky structure; firm, slightly sticky, slightly plastic; common medium roots throughout; common fine moderate-continuity irregular pores; 20 percent discontinuous faint clay films on surfaces along root channels; very strongly acid; diffuse wavy boundary.

2Bt2—13 to 31 inches; yellowish red (5YR 5/8) silty clay; strong coarse angular blocky structure; firm, slightly sticky, slightly plastic; common fine roots throughout; common fine moderate-continuity tubular pores; 40 percent continuous distinct clay films on faces of peds; 10 percent flat moderately acid fragments of shale; very strongly acid; diffuse wavy boundary.



Figure 15.—Typical profile of a Bengal soil.

2Bt3—31 to 37 inches; yellowish red (5YR 5/6) channery silty clay; strong coarse angular blocky structure; firm, slightly sticky, slightly plastic; common fine moderate-continuity tubular pores; 50 percent continuous distinct clay films on faces of peds; 30 percent flat moderately acid fragments of shale; very strongly acid; diffuse irregular boundary.

2Cr—37 to 40 inches; red and gray, soft, acid shale that is tilted and fractured.

Range in Characteristics

The thickness of the solum and depth to bedrock range from 20 to 40 inches. They are extremely variable within short distances due to the irregular boundary between the lower part of the 2Bt horizon or the 2BC horizon and the underlying tilted bedrock.

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4

Texture—cobbly silt loam or cobbly loam

Rock fragments—15 to 60 percent sandstone or chert fragments less than 10 inches in diameter and/or shale fragments less than 6 inches in length

Reaction—moderately acid or strongly acid

E horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4

Texture—silt loam, loam, or their gravelly or cobbly analogs

Rock fragments—0 to 35 percent sandstone or chert fragments less than 10 inches in diameter and/or shale fragments less than 6 inches in length

Reaction—moderately acid to very strongly acid

Bt horizon:

Color—hue of 5YR, value of 4, and chroma of 4; or hue of 5YR or 7.5YR, value of 5, and chroma of 6 to 8

Texture—clay loam, silty clay loam, or their gravelly or channery analogs

Rock fragments—0 to 35 percent sandstone or chert fragments less than 10 inches in diameter and/or shale fragments less than 6 inches in length
Reaction—strongly acid or very strongly acid

2Bt horizon:

Color—hue of 5YR, value of 4 or 5, and chroma of 4 to 8; or hue of 7.5YR, value of 4 or 5, and chroma of 4 to 8
Texture—silty clay, silty clay loam, clay loam, clay, or their gravelly or channery analogs
Redoximorphic features (where present)—accumulations and depletions in shades of brown, yellow, and gray
Rock fragments—0 to 35 percent sandstone or chert fragments less than 10 inches in diameter and/or shale fragments less than 6 inches in length
Reaction—strongly acid or very strongly acid

2BC horizon (where present):

Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 to 8; or hue of 7.5YR, value of 5, and chroma of 4 to 8
Texture—silty clay loam, silty clay, clay, clay loam, or their channery analogs
Rock fragments—0 to 35 percent shale fragments less than 6 inches in length or sandstone or chert fragments less than 10 inches in diameter
Reaction—strongly acid or very strongly acid

2Cr horizon:

This horizon consists of soft, fractured, tilted shale in shades of red, brown, and gray. Thin strata of sandstone and/or siltstone or chert and/or novaculite are in some pedons. In some pedons, this horizon contains seams and/or pockets of fine earth at a depth of more than 40 inches.

Bigfork Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Mountainsides

Position on the landscape: Convex areas on summits and linear-convex areas on shoulders and backslopes

Parent material: Gravelly residuum weathered from novaculite

Geology: Arkansas Novaculite

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Moderately deep to lithic bedrock

Shrink-swell potential: Moderate

Slope: 3 to 60 percent

Taxonomic classification: Loamy-skeletal, siliceous, semiactive, thermic Typic Hapludults

Associated Soils

The Bigfork series is commonly associated with Avant, Bengal, Carnasaw, Clebit, and Yanush soils.

Typical Pedon

Bigfork very stony loam in a forested area of Bigfork-Yanush-Rock outcrop complex, 35 to 60 percent slopes, rubbly; Langley USGS topographic quadrangle; NW¹/₄NW¹/₄NW¹/₄ sec. 1, T. 5 S., R. 27 W.; lat. 34 degrees 20 minutes 49.12 seconds N. and long. 93 degrees 50 minutes 51.13 seconds W.

- A—0 to 3 inches; brown (10YR 4/3) very stony loam; weak fine granular structure; friable; many medium roots throughout; fine low-continuity irregular pores; 20 percent angular 3.0- to 9.8-inch fragments of novaculite, 20 percent angular 0.1- to 3.0-inch fragments of novaculite, and 25 percent angular 9.8- to 23.6-inch fragments of novaculite; strongly acid; clear smooth boundary.
- E—3 to 7 inches; yellowish brown (10YR 5/4) very cobbly loam; weak fine subangular blocky structure; friable; common medium roots throughout; common fine low-continuity irregular pores; 10 percent angular 0.1- to 3.0-inch fragments of novaculite, 15 percent angular 9.8- to 23.6-inch fragments of novaculite, and 15 percent angular 3.0- to 9.8-inch fragments of novaculite; strongly acid; clear smooth boundary.
- Bt—7 to 25 inches; strong brown (7.5YR 5/8) very cobbly silty clay loam; moderate medium subangular blocky structure; firm; common fine roots throughout; common fine low-continuity irregular pores; 30 percent discontinuous faint clay films on faces of peds; 10 percent angular 0.1- to 3.0-inch fragments of novaculite, 15 percent angular 3.0- to 9.8-inch fragments of novaculite, and 15 percent angular 9.8- to 23.6-inch fragments of novaculite; very strongly acid; abrupt irregular boundary.
- R—25 to 40 inches; hard novaculite bedrock that is tilted and fractured.

Range in Characteristics

The thickness of the solum and depth to bedrock range from 20 to 40 inches. They are extremely variable due to the irregular boundary between the Bt horizon and the underlying tilted bedrock.

A horizon:

- Color—hue of 7.5YR or 10YR, value of 3 or 4, and chroma of 2 or 3
- Texture—stony loam, very stony loam, or extremely stony loam
- Rock fragments—35 to 80 percent novaculite fragments up to 10 inches in diameter
- Reaction—slightly acid to strongly acid

E horizon:

- Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4
- Texture—very cobbly loam, very cobbly silt loam, very gravelly loam, or very gravelly silt loam
- Rock fragments—35 to 60 percent novaculite fragments up to 10 inches in diameter
- Reaction—slightly acid to strongly acid

Bt horizon:

- Color—hue of 5YR, value of 4 or 5, and chroma of 6 to 8; or hue of 7.5YR or 10YR, value of 5, and chroma of 6 to 8
- Texture—very gravelly silty clay loam, very gravelly clay loam, very cobbly silty clay loam, or very cobbly clay loam
- Rock fragments—35 to 70 percent novaculite fragments up to 10 inches in diameter
- Reaction—strongly acid to extremely acid

R layer:

- This layer consists of hard, massive novaculite bedrock that is fractured and, in places, is interbedded with sandstone and shale.

Billstown Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Local physiographic area: Old Caddo Gap Road

Soil Survey of Pike County, Arkansas

Geomorphic setting: Interfluves in the Blackland Prairie

Position on the landscape: Linear-convex areas on interfluves and crests

Parent material: Clayey marl, marine deposits, or both

Geology: Brownstown Marl

Drainage class: Moderately well drained

Permeability: Very slow or impermeable

Soil depth class: Very deep

Shrink-swell potential: Very high

Slope: 3 to 15 percent

Taxonomic classification: Very-fine, smectitic, thermic Chromic Dystruderts

Associated Soils

The Billstown series is commonly associated with Delight, Japany, Marietta, Ochlockonee, Peanutrock, and Tiak soils.

Typical Pedon

Billstown loam, 3 to 8 percent slopes; in a pasture; field soil sample S03AR109-6; NW¹/₄NW¹/₄SW¹/₄ sec. 5, T. 9 S., R. 23 W.; Pike County, Arkansas; Piney Grove USGS topographic quadrangle; lat. 33 degrees 59 minutes 29.80 seconds N. and long. 93 degrees 29 minutes 25.20 seconds W.

Ap—0 to 7 inches; dark grayish brown (10YR 4/2) loam; weak medium subangular blocky structure; friable; 10 percent fine distinct strong brown (7.5YR 4/6) masses of oxidized iron; moderately acid; clear smooth boundary.

E—7 to 13 inches; yellowish brown (10YR 5/6) gravelly silt loam; weak medium subangular blocky structure; friable; 5 percent medium faint iron depletions; 1 percent medium distinct iron depletions; 20 percent rounded 0.2- to 3.0-inch fragments of chert; very strongly acid; clear wavy boundary.

Bt1—13 to 22 inches; red (2.5YR 4/6) clay; strong coarse angular blocky structure; firm, very sticky, moderately plastic; 40 percent continuous distinct clay films on faces of peds; 1 percent fine prominent light brownish gray (10YR 6/2) iron depletions; very strongly acid; gradual wavy boundary.

Bt2—22 to 32 inches; red (2.5YR 4/6) clay; strong medium angular blocky structure; firm, very sticky, moderately plastic; 40 percent continuous distinct clay films on faces of peds; 25 percent medium prominent light yellowish brown (10YR 6/4) iron depletions; 1 percent fine prominent light brownish gray (10YR 6/2) iron depletions; very strongly acid; clear wavy boundary.

Btssg—32 to 49 inches; gray (10YR 6/1) clay; strong coarse angular blocky structure; firm, very sticky, moderately plastic; 40 percent continuous slickensides (pedogenic), 40 percent continuous distinct clay films on faces of peds, and 20 percent pressure faces; 15 percent medium prominent brownish yellow (10YR 6/6) masses of oxidized iron; very strongly acid; clear smooth boundary.

2Btss—49 to 64 inches; light olive brown (2.5Y 5/4) clay; strong coarse angular blocky structure; firm, very sticky, moderately plastic; 40 percent continuous distinct clay films on faces of peds, 20 percent pressure faces, and 40 percent continuous slickensides (pedogenic); 15 percent fine prominent black (10YR 2/1) iron depletions; moderately alkaline; gradual smooth boundary.

2Btkss—64 to 79 inches; olive yellow (2.5Y 6/6) silty clay; strong coarse angular blocky structure; firm, very sticky, moderately plastic; 40 percent continuous distinct clay films on faces of peds, 20 percent pressure faces, 40 percent continuous slickensides (pedogenic), 30 percent carbonate coats, and 30 percent organic stains; strong effervescence; moderately alkaline.

Range in Characteristics

Depth to horizons having secondary carbonates ranges from 30 to more than 60 inches. Depth to chalk bedrock characterized as a paralithic contact is more than 60 inches.

A or Ap horizon:

Color—hue of 5YR to 10YR, value of 3 to 6, and chroma of 2 to 4

Texture—loam

Rock fragments—0 to 35 percent subrounded and rounded sandstone fragments less than 3 inches in diameter

Reaction—very strongly acid to moderately alkaline

E horizon:

Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 3 to 6

Texture—fine sandy loam, very fine sandy loam, loam, clay loam, or silty clay loam

Rock fragments—0 to 35 percent subrounded and rounded sandstone fragments less than 3 inches in diameter

Reaction—very strongly acid to moderately alkaline

Bt horizon:

Color—hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 6 to 8

Redoximorphic features (where present)—few or common iron depletions in shades of gray and iron accumulations in shades of brown and red, generally increasing in abundance with depth. In some pedons, this horizon has few or common soft masses and/or concretions of iron and manganese.

Texture—silty clay loam, silty clay, or clay

Reaction—extremely acid to moderately alkaline

Btssg horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 1 or 2

Redoximorphic features—few to many iron depletions in shades of gray and iron accumulations in shades of brown and red, generally increasing in abundance with depth. In some pedons, this horizon has few or common soft masses and/or concretions of iron and manganese.

Texture—silty clay or clay

Slickensides—few to many

Reaction—dominantly extremely acid to slightly acid but ranges to moderately alkaline

2Btss horizon:

Color—hue of 2.5YR to 7.5YR, value of 4 to 6, and chroma of 4 to 8; hue of 2.5Y, value of 5 or 6, and chroma of 4 to 6; or no dominant matrix color and multicolored in shades of red, brown, and gray

Redoximorphic features—few to many iron depletions in shades of gray and iron accumulations in shades of brown and red, generally increasing in abundance with depth. In some pedons, this horizon has few or common soft masses and/or concretions of iron and manganese.

Texture—silty clay or clay

Slickensides—few to many

Reaction—dominantly extremely acid to slightly acid; neutral to moderately alkaline in the lower part of the horizon in some pedons

2Btkss horizon (where present):

Color—hue of 10YR to 5Y and value of 4 to 6 or hue of 5YR or 7.5YR and value of 5 or 6; chroma of 4 to 8 in ped interiors and 2 to 4 on exterior faces of peds or slickenside faces; or no dominant matrix color and variegated in shades of olive, brown, and gray

Redoximorphic features—few to many iron depletions in shades of gray and iron accumulations in shades of brown, most commonly on surfaces of peds or slickensides. In some pedons, this horizon has few or common soft masses and/or concretions of iron and manganese.

Texture—clay or silty clay

Slickensides—few to many

Calcium carbonate—common or many soft masses and few to many concretions or nodules

Reaction—dominantly slightly alkaline or moderately alkaline but ranges to neutral

2C horizon (where present):

This horizon consists of slightly alkaline or moderately alkaline marl or highly weathered chalk.

2Cr horizon (where present):

This horizon consists of weathered chalk bedrock below a depth of 60 inches. It is massive or has platy rock structure. It can be dug with difficulty with hand tools and is rippable by light machinery.

Bismarck Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Hillsides

Position on the landscape: Linear-convex areas on backslopes

Parent material: Gravelly residuum weathered from acid shale

Geology: Stanley Shale

Drainage class: Somewhat excessively drained

Permeability: Moderate

Soil depth class: Shallow to paralithic bedrock

Shrink-swell potential: Low

Slope: 1 to 60 percent

Taxonomic classification: Loamy-skeletal, mixed, semiactive, thermic, shallow Typic Dystrudepts

Associated Soils

The Bismarck series is commonly associated with Avant, Bigfork, Littlefir, Mazarn, Nashoba, Sherless, and Yanush soils.

Typical Pedon

Bismarck gravelly silt loam (fig. 16) in a forested area of Nashoba-Bismarck-Littlefir complex, 1 to 8 percent slopes; NW¹/₄SW¹/₄NW¹/₄ sec. 15, T. 6 S., R. 25 W.; Pike County, Arkansas; Narrows Dam USGS topographic quadrangle; lat. 34 degrees 13 minutes 56.64 seconds N. and long. 93 degrees 39 minutes 33.56 seconds W.

Ap—0 to 6 inches; brown (10YR 4/3) gravelly silt loam; weak fine granular structure; friable; common medium roots throughout; common fine low-continuity irregular pores; 15 percent subangular strongly cemented fragments of sandstone; strongly acid; abrupt smooth boundary.

Bw1—6 to 10 inches; yellowish brown (10YR 5/4) extremely channery silt loam; weak fine subangular blocky structure; friable; common medium roots throughout; common fine low-continuity irregular pores; 65 percent flat very angular weakly acid fragments of shale; very strongly acid; abrupt smooth boundary.

Bw2—10 to 16 inches; yellowish brown (10YR 5/6) extremely channery silt loam; weak medium subangular blocky structure; friable; common fine roots throughout;



Figure 16.—Typical profile of a Bismark soil.

common fine low-continuity irregular pores; 75 percent flat very angular weakly acid fragments of shale; very strongly acid; abrupt wavy boundary.
Cr—16 to 20 inches; gray, tilted, weakly cemented, soft, acid shale that is fractured and contains thin seams of soil material.

Range in Characteristics

Depth to bedrock ranges from 10 to 20 inches. This depth is extremely variable due to the irregular boundary between the Bw horizon and the underlying tilted bedrock.

A or Ap horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4

Texture—gravelly silt loam, very gravelly silt loam, very channery silt loam, cobbly silt loam, very cobbly silt loam, or stony silt loam

Rock fragments—15 to 60 percent sandstone, chert, or novaculite fragments less than 10 inches in diameter or shale fragments less than 6 inches in length

Reaction—strongly acid or very strongly acid, except where amendments have been applied

E horizon (where present):

Color—hue of 10YR, value of 4 to 6, and chroma of 3 or 4; or hue of 7.5YR, value of 4 or 5, and chroma of 4

Texture—channery, gravelly, very channery, or very gravelly analogs of silt loam

Rock fragments—15 to 60 percent sandstone, chert, or novaculite fragments less than 10 inches in diameter or shale fragments less than 6 inches in length

Reaction—strongly acid or very strongly acid, except where amendments have been applied

Bw horizon:

Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 4 to 6

Texture—very channery silt loam, extremely channery silt loam, very channery loam, or extremely channery loam

Rock fragments—35 to 80 percent shale fragments less than 6 inches in length

Reaction—strongly acid to extremely acid

Cr horizon:

This horizon consists of fractured, tilted, soft, acid shale. In some pedons, it has thin strata of interbedded sandstone and/or siltstone or chert and novaculite.

This horizon is in shades of gray, brown, yellow, and red. In some pedons, it contains seams and/or pockets of soil material at a depth of more than 20 inches.

Bonnerdale Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Concave upland slopes; heads of upland drainageways

Position on the landscape: Linear-concave areas on side slopes and base slopes

Parent material: Loamy residuum weathered from sandstone

Geology: Stanley Shale

Drainage class: Somewhat poorly drained

Permeability: Moderate

Soil depth class: Deep to paralithic bedrock

Shrink-swell potential: High

Slope: 1 to 8 percent

Taxonomic classification: Coarse-loamy, siliceous, semiactive, thermic Aquic

Hapludults

Associated Soils

The Bonnerdale series is commonly associated with Littlefir, Mazarn, Nashoba, Pirum, and Sherless soils.

Typical Pedon

Bonnerdale fine sandy loam, 3 to 8 percent slopes; in a pasture; NW¹/₄SE¹/₄NE¹/₄ sec. 10, T. 6 S., R. 25 W.; Pike County, Arkansas; Narrows Dam USGS topographic quadrangle; lat. 34 degrees 14 minutes 45.00 seconds N. and long. 93 degrees 38 minutes 39.15 seconds W.

- Ap—0 to 3 inches; dark yellowish brown (10YR 4/4) fine sandy loam; weak fine granular structure; very friable; many fine roots throughout; fine irregular pores; slightly acid; abrupt smooth boundary.
- BA—3 to 13 inches; yellowish brown (10YR 5/4) fine sandy loam; weak fine subangular blocky structure; friable; common fine roots throughout; fine tubular pores; 20 percent medium distinct light brownish gray (10YR 6/2) iron depletions throughout; 10 percent medium distinct irregular extremely weakly cemented strong brown (7.5YR 5/8) masses of oxidized iron throughout with clear boundaries; strongly acid; clear smooth boundary.
- Bt1—13 to 24 inches; strong brown (7.5YR 5/8) fine sandy loam; weak medium subangular blocky structure; friable; few fine roots throughout; medium tubular pores; 20 percent medium grayish brown (10YR 5/2) iron depletions throughout; 15 percent patchy faint strong brown (7.5YR 5/6) clay films on surfaces along root channels; strongly acid; clear smooth boundary.
- Bt2—24 to 35 inches; brownish yellow (10YR 6/6), light brownish gray (10YR 6/2), and strong brown (7.5YR 5/8) fine sandy loam; weak medium subangular blocky structure; friable; fine tubular pores; 15 percent patchy faint strong brown (7.5YR 5/6) clay films on surfaces along root channels; strongly acid; clear smooth boundary.
- Bt3—35 to 43 inches; strong brown (7.5YR 5/8) and light brownish gray (10YR 6/2) fine sandy loam; weak medium subangular blocky structure; friable; medium irregular pores; 15 percent patchy faint strong brown (7.5YR 5/8) clay films on surfaces along root channels; 10 percent fine prominent irregular extremely weakly cemented red (2.5YR 4/6) masses of oxidized iron throughout with sharp boundaries; 5 percent subangular strongly cemented fragments of sandstone; very strongly acid; clear smooth boundary.
- BC—43 to 54 inches; strong brown (7.5YR 5/6) and pinkish gray (7.5YR 6/2) fine sandy loam; weak medium granular structure; friable; medium irregular pores; 10 percent subangular strongly cemented fragments of sandstone; very strongly acid; clear wavy boundary.
- 2Cr—54 to 60 inches; soft, partially weathered sandstone that is fractured and tilted.

Range in Characteristics

The thickness of the solum and depth to bedrock range from 40 to 60 inches. Depth to sandstone, shale, or both ranges from 40 to more than 72 inches.

A or Ap horizon:

- Color—hue of 10YR, value of 4 or 5, and chroma of 2 to 4
- Texture—fine sandy loam
- Rock fragments—0 to 15 percent sandstone fragments less than 3 inches in diameter
- Reaction—strongly acid or very strongly acid, except where amendments have been applied

BA horizon:

- Color—hue of 10YR, value of 4 to 6, and chroma of 3 to 8
- Texture—fine sandy loam or sandy loam
- Rock fragments—0 to 15 percent sandstone fragments less than 3 inches in diameter
- Reaction—strongly acid or very strongly acid

Bt horizon:

Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 4 to 8; or, in the lower part of some horizons, no dominant matrix hue and variegated in shades of brown, yellow, and gray
Texture—fine sandy loam or sandy loam
Redoximorphic features—accumulations and depletions in shades of brown, yellow, and gray
Rock fragments—0 to 15 percent sandstone fragments less than 3 inches in diameter
Reaction—strongly acid to extremely acid

BC or 2C horizon (where present):

Color—dominantly variegated in shades of brown, yellow, and gray; or, in some pedons, hue of 10YR, value of 5 or 6, and chroma of 1 or 2
Texture—fine sandy loam
Redoximorphic features—accumulations and depletions in shades of brown, yellow, and gray
Rock fragments—0 to 35 percent sandstone fragments less than 3 inches in diameter and/or shale fragments less than 6 inches in length
Reaction—dominantly strongly acid to extremely acid. In some pedons where weathering from alkaline shale has occurred, the lower part of the horizon is alkaline.

2Cr horizon:

This horizon consists of gray, brown, and red, soft, weakly cemented, acid shale with few thin strata of interbedded sandstone. It is less than 5 percent, by volume, fine-earth material. Beds are fractured, and the dip ranges from 25 degrees to near vertical. Hardness ranges from 1.5 to 3.0 (Mohs' scale).

Carnasaw Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Mountainsides

Position on the landscape: Convex areas on summits and linear-convex areas on shoulders and backslopes

Parent material: Clayey residuum weathered from shale and sandstone

Geology: Jackfork Sandstone

Drainage class: Well drained

Permeability: Slow

Soil depth class: Deep to paralithic bedrock

Shrink-swell potential: High

Slope: 1 to 60 percent

Taxonomic classification: Fine, mixed, semiactive, thermic Typic Hapludults

Associated Soils

The Carnasaw series is commonly associated with Avant, Bigfork, Clebit, Pirum, Sherless, Yanush, and Zafra soils.

Typical Pedon

Carnasaw stony fine sandy loam (fig. 17) in an area of Carnasaw-Zafra-Clebit complex, 15 to 35 percent slopes, rubbly; in a forested area; SE¹/₄NE¹/₄SE¹/₄ sec. 13, T. 6 S., R. 25 W.; Pike County, Arkansas; Murfreesboro USGS topographic quadrangle; lat. 34 degrees 13 minutes 25.21 seconds N. and long. 93 degrees 36 minutes 31.77 seconds W.



Figure 17.—Typical profile of a Carnasaw soil.

- A—0 to 3 inches; brown (10YR 4/3) stony fine sandy loam; weak fine granular structure; friable; common coarse roots throughout; common fine low-continuity irregular pores; 25 percent angular very strongly cemented fragments of sandstone; strongly acid; clear smooth boundary.
- E—3 to 10 inches; yellowish brown (10YR 5/4) cobbly fine sandy loam; weak fine subangular blocky structure; friable; common medium roots throughout; common fine low-continuity irregular pores; very strongly acid; clear smooth boundary.
- Bt1—10 to 40 inches; strong brown (7.5YR 5/6) silty clay; strong coarse subangular blocky structure; firm, slightly sticky, slightly plastic; few medium roots throughout; common very fine moderate-continuity tubular pores; 30 percent discontinuous distinct reddish brown (5YR 4/4) clay films on faces of peds; 5 percent medium distinct irregular extremely weakly cemented yellowish brown (10YR 5/6) iron depletions throughout with clear boundaries; very strongly acid; clear smooth boundary.
- Bt2—40 to 58 inches; red (2.5YR 5/6) and light yellowish brown (10YR 6/4) silty clay; strong coarse subangular blocky structure; firm, slightly sticky, slightly plastic; common very fine moderate-continuity tubular pores; 20 percent continuous faint reddish brown (2.5YR 4/4) clay films on faces of peds; 5 percent medium prominent irregular extremely weakly cemented light brownish gray (10YR 6/2) iron depletions throughout with clear boundaries; 5 percent flat very angular weakly acid fragments of shale; very strongly acid; abrupt smooth boundary.
- Cr—58 to 60 inches; fractured and tilted shale and interbedded sandstone and shale in shades of red, brown, yellow, and gray.

Range in Characteristics

The thickness of the solum and depth to bedrock range from 40 to 60 inches. They are

extremely variable within short distances due to the irregular boundary between the BC horizon or the lower part of the Bt horizon and the underlying bedrock.

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 or 3
Texture—cobble silt loam, stony silt loam, cobble fine sandy loam, stony fine sandy loam, or very stony fine sandy loam
Rock fragments—15 to 60 percent sandstone or quartzite fragments up to 24 inches in diameter
Reaction—moderately acid to very strongly acid

E horizon:

Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 3 or 4
Texture—silt loam, loam, fine sandy loam, or their gravelly or cobble analogs
Rock fragments—0 to 35 percent sandstone or quartzite fragments up to 10 inches in diameter
Reaction—moderately acid to very strongly acid

Upper part of the Bt horizon:

Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 4 to 8; or hue of 7.5YR, value of 5, and chroma of 6 to 8
Texture—silty clay loam, clay loam, or silty clay
Rock fragments—0 to 15 percent sandstone or quartzite fragments up to 3 inches in diameter or shale fragments less than 6 inches in length
Reaction—strongly acid or very strongly acid

Lower part of the Bt horizon:

Color—hue of 2.5YR or 5YR, value of 4 to 6, and chroma of 6 to 8
Texture—silty clay loam, clay loam, silty clay, clay, or their gravelly or channery analogs
Rock fragments—0 to 35 percent sandstone or quartzite fragments up to 3 inches in diameter or shale fragments less than 6 inches in length
Reaction—strongly acid to extremely acid

BC horizon (where present):

Color—hue of 2.5YR or 5YR, value of 4 to 6, and chroma of 6 to 8; or no dominant matrix hue and variegated in shades of red, brown, yellow, and gray
Texture—clay loam, silty clay loam, silty clay, or their channery analogs
Rock fragments—0 to 35 percent shale fragments less than 6 inches in length
Reaction—strongly acid to extremely acid

Cr horizon:

This horizon consists of soft, acid shale. In some pedons, it has thin strata of interbedded sandstone and/or siltstone. Typically, this horizon is fractured and tilted. Colors include shades of red, brown, yellow, and gray. In some pedons, this horizon contains seams and/or pockets of soil material at a depth of more than 60 inches.

Ceda Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on flood plains

Parent material: Gravelly alluvium

Geology: Stanley Shale

Drainage class: Well drained

Permeability: Rapid

Soil Survey of Pike County, Arkansas

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 0 to 3 percent

Taxonomic classification: Loamy-skeletal, siliceous, semiactive, nonacid, thermic Typic Udifluvents

Associated Soils

The Ceda series is commonly associated with Dela, Kenn, and Speer soils.

Typical Pedon

Ceda very cobbly fine sandy loam (fig. 18) in a forested area of Kenn-Ceda complex, 0 to 3 percent slopes, frequently flooded; SE¹/₄NW¹/₄SW¹/₄ sec. 16, T. 5 S., R. 27 W.; Pike County, Arkansas; Athens USGS topographic quadrangle; lat. 34 degrees 18 minutes 35.97 seconds N. and long. 93 degrees 53 minutes 56.69 seconds W.

A—0 to 12 inches; brown (10YR 4/3) very cobbly fine sandy loam; weak medium granular structure; friable; many fine roots throughout; common fine low-continuity irregular pores; 40 percent rounded very strongly cemented fragments of sandstone; moderately acid; clear wavy boundary.

C1—12 to 22 inches; dark yellowish brown (10YR 4/4) very cobbly fine sandy loam; massive; friable; common fine roots throughout; common fine low-continuity irregular pores; 50 percent rounded very strongly cemented fragments of sandstone; moderately acid; clear wavy boundary.

C2—22 to 55 inches; dark yellowish brown (10YR 4/4) extremely gravelly fine sandy loam; massive; friable; common fine roots throughout; common medium low-continuity irregular pores; 70 percent rounded very strongly cemented fragments of sandstone; moderately acid; clear wavy boundary.

C3—55 to 80 inches; dark yellowish brown (10YR 4/4) extremely cobbly fine sandy loam; massive; friable; common medium low-continuity irregular pores; 80 percent rounded very strongly cemented fragments of sandstone; moderately acid.

Range in Characteristics

The thickness of the solum ranges from 40 to more than 60 inches.

A horizon:

Color—hue of 10YR, value of 3 to 5, and chroma of 2 or 3

Texture—very gravelly loam or very cobbly fine sandy loam

Rock fragments—35 to 60 percent sandstone, novaculite, or chert fragments up to 10 inches in diameter

Reaction—slightly acid or moderately acid

C horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 2 to 6

Texture—very gravelly, extremely gravelly, or cobbly analogs of fine sandy loam or loam

Rock fragments—35 to 85 percent sandstone, novaculite, or chert fragments up to 10 inches in diameter

Reaction—slightly acid or moderately acid

Clebit Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Mountainsides

Position on the landscape: Convex areas on summits and linear-convex areas on shoulders and backslopes



Figure 18.—Typical profile of a Ceda soil.

Parent material: Gravelly residuum weathered from sandstone

Geology: Jackfork Sandstone

Drainage class: Well drained

Permeability: Moderately rapid

Soil depth class: Shallow to lithic bedrock

Shrink-swell potential: Low

Slope: 3 to 60 percent

Taxonomic classification: Loamy-skeletal, siliceous, semiactive, thermic Lithic
Dystrudepts

Associated Soils

The Clebit series is commonly associated with Bengal, Carnasaw, Littlefir, Nashoba, Pirum, and Zafra soils.

Typical Pedon

Clebit extremely stony fine sandy loam (fig. 19) in a forested area of Zafra-Carnasaw-Clebit complex, 35 to 60 percent slopes, rubbly; NE¹/₄NE¹/₄SE¹/₄ sec. 16, T. 6 S., R. 25 W.; Pike County, Arkansas; Narrows Dam USGS topographic quadrangle; lat. 34 degrees 13 minutes 30.67 seconds N. and long. 93 degrees 39 minutes 37.54 seconds W.

A—0 to 4 inches; dark brown (10YR 3/3) extremely stony fine sandy loam; weak fine granular structure; friable; 15 percent subangular very strongly cemented 7.9- to 23.6-inch fragments of sandstone, 20 percent subangular very strongly cemented 3.0- to 7.9-inch fragments of sandstone, and 30 percent subangular very strongly cemented 0.1- to 3.0-inch fragments of sandstone; strongly acid; clear smooth boundary.

Bw1—4 to 9 inches; dark yellowish brown (10YR 4/4) very cobbly fine sandy loam; weak fine subangular blocky structure; friable; 15 percent subangular very strongly cemented 3.0- to 7.9-inch fragments of sandstone and 25 percent subangular very strongly cemented 0.1- to 3.0-inch fragments of sandstone; strongly acid; clear irregular boundary.

Bw2—9 to 19 inches; brown (7.5YR 4/4) very gravelly loam; weak medium subangular blocky structure; friable; 15 percent subangular very strongly cemented 3.0- to 7.9-inch fragments of sandstone and 35 percent subangular very strongly cemented 0.1- to 3.0-inch fragments of sandstone; very strongly acid; clear irregular boundary.

R—19 to 40 inches; hard, unweathered sandstone bedrock that is fractured and tilted and contains a few seams of interbedded shale, soft sandstone, or both.

Range in Characteristics

The thickness of the solum and depth to bedrock range from 10 to 20 inches. They are extremely variable within short distances due to the irregular boundary between the Bw horizon and the underlying tilted bedrock.

A horizon:

Color—hue of 10YR, value of 3 to 5, and chroma of 2 or 3

Texture—very stony fine sandy loam or extremely stony fine sandy loam

Rock fragments—35 to 75 percent sandstone fragments up to 10 inches in diameter

Reaction—moderately acid or strongly acid

Bw horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 3 to 6

Texture—very gravelly loam, very gravelly fine sandy loam, very cobbly loam, or very cobbly fine sandy loam



Figure 19.—Typical profile of a Clebit soil.

Rock fragments—35 to 60 percent sandstone fragments up to 10 inches in diameter
Reaction—moderately acid to very strongly acid

R layer:

This layer consists of hard sandstone that is fractured and tilted.

Cupco Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Flood plains

Position on the landscape: Linear-concave areas in depressions on treads of flood-plain steps

Parent material: Loamy alluvium

Geology: Stanley Shale

Drainage class: Poorly drained

Permeability: Moderately slow

Soil depth class: Very deep

Shrink-swell potential: Moderate

Slope: 0 to 2 percent

Taxonomic classification: Fine-silty, siliceous, active, thermic Typic Epiaqualfs

Associated Soils

The Cupco series is commonly associated with Dela, Kenn, Neff, Speer, and Woodall soils.

Typical Pedon

Cupco silt loam, 0 to 2 percent slopes, rarely flooded; in a pasture; SE¹/₄SE¹/₄NW¹/₄ sec. 3, T. 5 S., R. 24 W.; Pike County, Arkansas; Glenwood USGS topographic quadrangle; lat. 34 degrees 20 minutes 6.99 seconds N. and long. 93 degrees 34 minutes 16.29 seconds W.

- A—0 to 3 inches; grayish brown (10YR 5/2) silt loam; weak fine granular structure; friable; common fine roots throughout; common fine low-continuity irregular pores; slightly acid; abrupt smooth boundary.
- BA—3 to 25 inches; light brownish gray (10YR 6/2) silt loam; weak fine subangular blocky structure; friable; common fine roots throughout; fine low-continuity irregular pores; 20 percent fine distinct strong brown (7.5YR 5/6) iron accumulations throughout; moderately acid; clear smooth boundary.
- Bt1—25 to 41 inches; light brownish gray (10YR 6/2) silty clay loam; moderate medium subangular blocky structure; firm; few very fine roots throughout; common very fine low-continuity tubular pores; 30 percent discontinuous faint strong brown (7.5YR 5/6) clay films on faces of peds; 20 percent medium strong brown (7.5YR 5/8) iron depletions throughout; 10 percent medium irregular iron-manganese masses; moderately acid; clear smooth boundary.
- Bt2—41 to 62 inches; light brownish gray (10YR 6/2) and strong brown (7.5YR 5/8) silty clay loam; moderate coarse subangular blocky structure; firm; common very fine low-continuity tubular pores; 30 percent discontinuous faint strong brown (7.5YR 5/6) clay films on faces of peds; 25 percent medium irregular iron-manganese masses; moderately acid; clear smooth boundary.
- Bt3—62 to 80 inches; strong brown (7.5YR 5/8) and light brownish gray (10YR 6/2) silty clay loam; moderate coarse subangular blocky structure; firm; common very fine low-continuity tubular pores; 40 percent discontinuous faint brown (7.5YR 4/4) clay films on faces of peds; 25 percent medium irregular iron-manganese masses; slightly acid.

Range in Characteristics

The solum is more than 60 inches thick.

A horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 2 or 3

Texture—silt loam

Soil Survey of Pike County, Arkansas

Reaction—slightly acid to very strongly acid, except where amendments have been applied

E horizon (where present):

Color—hue of 10YR, value of 5 or 6, and chroma of 2

Texture—silt loam

Reaction—slightly acid to very strongly acid, except where amendments have been applied

BA horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 2 or 3; or variegated in shades of brown and gray

Texture—silt loam

Reaction—slightly acid to very strongly acid

BE horizon (where present):

Color—hue of 10YR, value of 5 or 6, and chroma of 2 or 3

Texture—silt loam

Reaction—slightly acid to very strongly acid

Bt1 and Bt2 horizons:

Color—hue of 10YR, value of 4 or 5, and chroma of 2 or 3

Texture—silty clay loam or clay loam

Redoximorphic features—depletions and accumulations in shades of brown, yellow, and gray. Some ped faces have coatings with chroma of 1 or 2.

Reaction—slightly acid to very strongly acid

Bt3 horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 2 or 3; or no dominant matrix hue and variegated in shades of brown, yellow, and gray

Texture—silty clay loam or clay loam

Redoximorphic features—depletions and accumulations in shades of brown, yellow, and gray. Some ped faces have coatings with chroma of 1 or 2.

Reaction—neutral to very strongly acid

BC horizon (where present):

Color—hue of 10YR, value of 4 or 5, and chroma of 2 or 3; or no dominant matrix hue and variegated in shades of brown, yellow, and gray

Texture—clay loam, silty clay loam, or silty clay

Redoximorphic features—depletions and accumulations in shades of brown, yellow, and gray. Some ped faces have coatings with chroma of 1 or 2.

Reaction—strongly acid to extremely acid

Dela Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on flood plains

Parent material: Loamy alluvium derived from sandstone

Geology: Stanley Shale

Drainage class: Moderately well drained

Permeability: Moderately rapid

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 0 to 2 percent

Taxonomic classification: Coarse-loamy, siliceous, active, nonacid, thermic Typic Udifluvents

Associated Soils

The Dela series is commonly associated with Ceda, Cupco, Kenn, Neff, Speer, Toine, and Woodall soils.

Typical Pedon

Dela fine sandy loam, 0 to 2 percent slopes, frequently flooded; in a pasture; SW¹/₄ NW¹/₄NE¹/₄ sec. 14, T. 5 S., R. 24 W.; Pike County, Arkansas; Glenwood USGS topographic quadrangle; lat. 34 degrees 18 minutes 35.49 seconds N. and long. 93 degrees 32 minutes 29.21 seconds W.

A1—0 to 3 inches; dark grayish brown (10YR 4/2) fine sandy loam; weak medium granular structure; very friable; common fine roots throughout; few fine low-continuity irregular pores; strongly acid; clear smooth boundary.

A2—3 to 8 inches; brown (10YR 4/3) fine sandy loam; moderate medium granular structure; very friable; common fine roots throughout; few fine low-continuity irregular pores; strongly acid; clear smooth boundary.

C1—8 to 45 inches; yellowish brown (10YR 5/4) fine sandy loam; massive; friable; few fine roots throughout; strongly acid; clear smooth boundary.

C2—45 to 51 inches; yellowish brown (10YR 5/4) fine sandy loam; massive; friable; 30 percent medium distinct irregular weakly cemented iron depletions infused into the matrix along faces of peds; very strongly acid; gradual irregular boundary.

C3—51 to 80 inches; light brownish gray (10YR 6/2) and yellowish brown (10YR 5/4) very gravelly fine sandy loam; massive; friable; 40 percent rounded very strongly cemented fragments of sandstone; very strongly acid.

Range in Characteristics

The thickness of the solum ranges from 40 to more than 60 inches.

A horizon:

Color—hue of 10YR, value of 4, and chroma of 2 or 3

Texture—fine sandy loam

Reaction—slightly acid to strongly acid, except where amendments have been applied

C horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 3 to 6

Texture—fine sandy loam, sandy loam, or loamy fine sand; stratified in some pedons with thin strata of finer or coarser soil material

Redoximorphic features—depletions and accumulations in shades of brown, yellow, and gray

Reaction—neutral to strongly acid

Delight Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Interfluves

Position on the landscape: Linear-convex areas on crests and interfluves

Parent material: Clayey marine deposits derived from claystone

Geology: Brownstown Marl

Drainage class: Moderately well drained

Permeability: Moderately slow

Soil depth class: Moderately deep to paralithic bedrock

Shrink-swell potential: Very high

Slope: 3 to 8 percent

Taxonomic classification: Fine, smectitic, thermic Aquic Hapluderts

Associated Soils

The Delight series is commonly associated with Billstown and Japany soils.

Typical Pedon

Delight silty clay, 3 to 8 percent slopes; in a pasture; SE¹/₄NE¹/₄SW¹/₄ sec. 36, T. 8 S., R. 24 W.; Pike County, Arkansas; Delight USGS topographic quadrangle; lat. 34 degrees 0 minutes 21.00 seconds N. and long. 93 degrees 31 minutes 2.00 seconds W.

- A—0 to 4 inches; dark yellowish brown (10YR 4/4) silty clay; moderate fine and medium subangular blocky and moderate medium granular structure; firm, slightly sticky, slightly plastic; 1 percent fine very weakly cemented carbonate masses in the matrix; 5 percent subrounded 0.1- to 3.0-inch fragments of sandstone; neutral; clear smooth boundary.
- BA—4 to 8 inches; light olive brown (2.5Y 5/4) silty clay; moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; 1 percent fine prominent strong brown (7.5YR 5/6) masses of oxidized iron; 1 percent fine very weakly cemented carbonate masses in the matrix; moderately alkaline; clear wavy boundary.
- Btkss—8 to 12 inches; light olive brown (2.5Y 5/6) silty clay; moderate medium and coarse angular blocky structure; firm, very sticky, very plastic; 60 percent continuous distinct clay films on faces of peds and 40 percent discontinuous slickensides (pedogenic) on vertical faces of peds; 5 percent medium prominent strong brown (7.5YR 5/6) masses of oxidized iron; 5 percent medium prominent gray (10YR 6/1) iron depletions; 1 percent coarse prominent gray (10YR 6/1) iron depletions; 1 percent fine very weakly cemented carbonate masses in the matrix; moderately alkaline; clear smooth boundary.
- Bkss1—12 to 20 inches; light olive brown (2.5Y 5/4) silty clay; moderate medium and coarse angular blocky structure; firm, very sticky, very plastic; 60 percent discontinuous slickensides (pedogenic) on vertical faces of peds; 25 percent medium prominent strong brown (7.5YR 5/8) masses of oxidized iron; 10 percent medium prominent gray (5Y 5/1) iron depletions; 5 percent medium very weakly cemented carbonate masses and 1 percent coarse very weakly cemented carbonate masses in the matrix; moderately alkaline; clear smooth boundary.
- Bkss2—20 to 29 inches; strong brown (7.5YR 5/6) and gray (10YR 5/1) silty clay; moderate coarse columnar and strong medium angular blocky structure; very firm, very sticky, very plastic; 60 percent discontinuous slickensides (pedogenic) on vertical faces of peds; 15 percent fine prominent strong brown (7.5YR 5/8) masses of oxidized iron; 1 percent medium prominent strong brown (7.5YR 5/8) masses of oxidized iron; 10 percent fine very weakly cemented carbonate masses, 15 percent medium very weakly cemented carbonate masses, 1 percent medium strongly cemented carbonate nodules, 15 percent coarse very weakly cemented carbonate masses, and 1 percent coarse strongly cemented carbonate nodules; 5 percent weakly cemented fragments of claystone; moderately alkaline; clear smooth boundary.
- Bkss3—29 to 41 inches; yellowish brown (10YR 5/6) and light gray (10YR 7/1) silty clay; strong medium platy and coarse angular blocky structure; very firm, very sticky, very plastic; 30 percent discontinuous slickensides (pedogenic) on vertical faces of peds; 5 percent medium and coarse iron-manganese concretions; 1 percent medium manganese masses; 1 percent fine very weakly cemented carbonate masses, 1 percent fine strongly cemented carbonate nodules, 15 percent medium very weakly cemented carbonate masses, 5 percent medium strongly cemented carbonate nodules, 1 percent coarse very weakly cemented carbonate masses, and 1 percent coarse strongly cemented carbonate nodules; 5 percent weakly cemented fragments of claystone; moderately alkaline; clear smooth boundary.

- Bkss4—41 to 70 inches; brown (10YR 5/3), yellowish brown (10YR 5/8), and gray (10YR 6/1) silty clay; strong coarse columnar and angular blocky structure; very firm, very sticky, very plastic; 30 percent discontinuous slickensides (pedogenic) on vertical faces of peds; 1 percent fine very weakly cemented carbonate masses, 1 percent fine strongly cemented carbonate nodules, 15 percent medium very weakly cemented carbonate masses, and 5 percent medium strongly cemented carbonate nodules; 10 percent weakly cemented fragments of claystone; moderately alkaline; clear smooth boundary.
- B/C—70 to 84 inches; very dark grayish brown (10YR 3/2), gray (10YR 6/1), and brownish yellow (10YR 6/6) clay; moderate coarse prismatic and strong coarse angular blocky structure; very firm, very sticky, very plastic; 50 percent weakly cemented fragments of claystone; moderately alkaline.

Range in Characteristics

The thickness of the solum and the depth to calcareous claystone, marl, or both are typically more than 60 inches.

A horizon:

- Color—hue of 2.5Y to 10YR, value of 3 to 5, and chroma of 2 to 4
Texture—silty clay
Calcium carbonate (where present)—few or common concentrations, masses, and nodules of calcium carbonate
Rock fragments—0 to 10 percent sandstone gravel and/or fossiliferous shells
Reaction—neutral to moderately alkaline

BA horizon:

- Color—hue of 2.5Y to 10YR, value of 3 to 5, and chroma of 2 to 4
Texture—silty clay loam or silty clay
Redoximorphic features (where present)—few or common in shades of brown
Calcium carbonate (where present)—few to many concentrations and masses
Reaction—neutral to moderately alkaline

Btkss horizon:

- Color—hue of 2.5Y, value of 4 to 6, and chroma of 3 to 6
Texture—silty clay or clay
Redoximorphic features (where present)—few or common in shades of brown and gray
Calcium carbonate—few to many concentrations, masses, and nodules
Reaction—neutral to moderately alkaline

Upper part of the Bkss horizon:

- Color—hue of 2.5Y to 10YR, value of 5 to 6, and chroma of 4 to 8
Texture—silty clay or clay
Redoximorphic features—few to many in shades of brown and gray
Calcium carbonate—few to many concentrations, masses, and nodules
Reaction—neutral to moderately alkaline

Lower part of the Bkss horizon:

- Color—hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 1 to 6; or no dominant matrix color and variegated in shades of gray, brown, and olive
Texture—silty clay, clay, or silty clay loam
Redoximorphic features—few to many in shades of brown and gray
Calcium carbonate—few to many concentrations, masses, and nodules
Reaction—neutral to moderately alkaline

B/C horizon:

- Color—variegated in shades of gray, brown, and olive

Redoximorphic features—few or common in shades of brown, black, and gray
Texture—silty clay, clay, or silty clay loam
Calcium carbonate—few to many concentrations
C material—calcareous claystone that has minor amounts of chalk in some pedons

C horizon (where present):

This horizon consists of unconsolidated, calcareous claystone. In most pedons, this horizon contains seams and pockets of silty clay or clay soil material. In some pedons, this horizon contains marl as a primary or secondary member.

Gurdon Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on treads of flood-plain steps

Parent material: Coarse-silty alluvium

Geology: Alluvium

Drainage class: Somewhat poorly drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Moderate

Slope: 0 to 3 percent

Taxonomic classification: Coarse-silty, siliceous, semiactive, thermic Aquic Paleudults

Associated Soils

The Gurdon series is commonly associated with Guyton, Ouachita, Sardis, and Toine soils.

Typical Pedon

Gurdon fine sandy loam, 0 to 2 percent slopes, occasionally flooded; in a forested area; NE¹/₄NW¹/₄SE¹/₄ sec. 5, T. 9 S., R. 23 W.; Pike County, Arkansas; Piney Grove USGS topographic quadrangle; lat. 33 degrees 59 minutes 30.82 seconds N. and long. 93 degrees 28 minutes 38.64 seconds W.

A—0 to 2 inches; fine sandy loam, brown (10YR 4/3) interior; moderate medium granular structure; friable; very strongly acid; clear smooth boundary.

BA—2 to 7 inches; very fine sandy loam, brown (10YR 5/3) interior; weak medium subangular blocky structure; friable; 25 percent medium prominent reddish yellow (7.5YR 6/8) iron-manganese masses; 5 percent subrounded very strongly cemented 0.1- to 0.8-inch fragments of sandstone; very strongly acid; clear smooth boundary.

Bt1—7 to 21 inches; very fine sandy loam, yellowish brown (10YR 5/8) interior; moderate medium subangular blocky structure; friable; 10 percent patchy faint clay films on surfaces along root channels; 15 percent medium distinct light brownish gray (10YR 6/2) iron depletions; 5 percent subrounded 0.1- to 0.8-inch fragments of sandstone; very strongly acid; clear smooth boundary.

Bt2—21 to 38 inches; light brownish gray (10YR 6/2), brownish yellow (10YR 6/6), strong brown (7.5YR 5/8), and red (2.5YR 5/8) silty clay loam; moderate medium subangular blocky structure; firm; 20 percent discontinuous faint clay films on bottom faces of peds; common medium prominent strong brown (7.5YR 5/8) and common medium prominent red (2.5YR 5/8) iron accumulations; 10 percent subrounded 0.1- to 0.8-inch sandstone fragments; very strongly acid; clear smooth boundary.

Bt3—38 to 80 inches; yellowish red (5YR 5/8), light brownish gray (10YR 6/2), strong brown (7.5YR 5/8), and brownish yellow (10YR 6/6) silty clay loam; moderate medium subangular blocky structure; firm; 20 percent discontinuous faint clay films on bottom faces of peds; 5 percent subrounded 0.1- to 0.8-inch fragments of sandstone; very strongly acid.

Range in Characteristics

The thickness of the solum ranges from 60 to over 80 inches. Reaction ranges from moderately acid to extremely acid throughout, except where lime has been applied. The content of plinthite ranges from 0 to 5 percent.

A horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 2 or 3
Redoximorphic features (where present)—few or common iron accumulations and depletions in shades of brown or yellow
Texture—fine sandy loam or very fine sandy loam

E horizon (where present):

Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4
Redoximorphic features (where present)—few or common iron accumulations and depletions in shades of brown or yellow
Texture—silt loam, very fine sandy loam, or loam

BA horizon:

Color—hue of 10YR, value of 5, and chroma of 3 to 6
Redoximorphic features (where present)—few to many iron accumulations and depletions in shades of brown or yellow
Texture—silt loam, very fine sandy loam, or loam

Upper part of the Bt horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 4 to 8
Redoximorphic features—few or common iron accumulations and depletions in shades of gray, brown, or yellow
Texture—silt loam, very fine sandy loam, or loam

Lower part of the Bt horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 2 to 6; or variegated in shades of red, brown, yellow, and gray
Redoximorphic features—iron accumulations and depletions in shades of gray, yellow, brown, or red; or variegated in shades of brown, yellow, and gray
Texture—silt loam, loam, or silty clay loam

Btx horizon (where present):

Color—hue of 10YR, value of 5 or 6, and chroma of 4 to 6; or variegated in shades of brown, yellow, and gray
Redoximorphic features—iron accumulations and depletions in shades of gray, brown, or yellow
Texture—silt loam, loam, or silty clay loam; 0 to 30 percent, by volume, compact and brittle

Guyton Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Flood plains

Position on the landscape: Linear-concave areas in depressions on treads of flood-plain steps

Parent material: Fine-silty alluvium

Soil Survey of Pike County, Arkansas

Geology: Alluvium

Drainage class: Poorly drained

Permeability: Slow

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 0 to 1 percent

Taxonomic classification: Fine-silty, siliceous, active, thermic Typic Glossaqualfs

Associated Soils

The Guyton series is commonly associated with Gurdon, Ouachita, Sardis, and Toine soils.

Typical Pedon

Guyton silt loam, 0 to 2 percent slopes, rarely flooded; in a pasture; NW¹/₄SE¹/₄NE¹/₄ sec. 30, T. 8 S., R. 25 W.; Pike County, Arkansas; Murfreesboro USGS topographic quadrangle; lat. 34 degrees 1 minute 47.50 seconds N. and long. 93 degrees 42 minutes 9.80 seconds W.

A—0 to 5 inches; light brownish gray (10YR 6/2) silt loam; weak medium subangular blocky structure; friable; 20 percent medium distinct brown (10YR 4/3) masses of oxidized iron in the matrix; very strongly acid; clear smooth boundary.

Eg—5 to 15 inches; gray (10YR 6/1) silt loam; weak medium subangular blocky structure; friable; 20 percent medium prominent yellowish brown (10YR 5/4) masses of oxidized iron in the matrix; very strongly acid; clear smooth boundary.

Btg1—15 to 40 inches; gray (10YR 6/1) silty clay loam; weak medium subangular blocky structure; firm; 25 percent discontinuous distinct clay films on bottom faces of peds; 20 percent medium prominent yellowish brown (10YR 5/6) masses of oxidized iron in the matrix; very strongly acid; clear smooth boundary.

Btg2—40 to 80 inches; strong brown (7.5YR 5/6) silty clay loam; weak medium subangular blocky structure; firm; 25 percent discontinuous distinct clay films on bottom faces of peds; 20 percent medium prominent light brownish gray (10YR 6/2) iron depletions in the matrix; very strongly acid.

Range in Characteristics

The thickness of the solum ranges from 50 to about 80 inches. The content of sand, which is dominantly very fine sand, ranges from 10 to 40 percent in the control section. The amount of exchangeable sodium ranges from less than 5 percent to 40 percent in the lower part of the solum.

A or Ap horizon:

Color—hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 2 or 3. Where value is 3, the horizon is less than 6 inches thick.

Texture—silt loam

Reaction—extremely acid to moderately acid

Eg horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 8, and chroma of 1 or 2

Redoximorphic features—few to many in shades of brown

Texture—silt loam, loam, or very fine sandy loam

Reaction—extremely acid to moderately acid

Other features—the lower boundary of the Eg horizon is clear irregular or abrupt irregular, and tongues extend into the Btg horizon.

Btg horizon:

Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2

Redoximorphic features—few to many in shades of brown or gray

Texture—silt loam, silty clay loam, or clay loam

Reaction—extremely acid to moderately acid

Japany Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Interfluves

Position on the landscape: Linear-concave areas on interfluves

Parent material: Marl, clayey marine deposits, or both

Geology: Dierks Limestone

Drainage class: Somewhat poorly drained

Permeability: Very slow or impermeable

Soil depth class: Very deep

Shrink-swell potential: Very high

Slope: 1 to 5 percent

Taxonomic classification: Fine, smectitic, thermic Vertic Hapludalfs

Associated Soils

The Japany series is commonly associated with Billstown and Delight soils.

Typical Pedon

Japany silty clay loam, 1 to 5 percent slopes; in a pasture; SE¹/₄NW¹/₄SW¹/₄ sec. 1, T. 8 S., R. 25 W.; Pike County, Arkansas; Delight USGS topographic quadrangle; lat. 34 degrees 4 minutes 51.50 seconds N. and long. 93 degrees 37 minutes 26.60 seconds W.

A—0 to 6 inches; brown (10YR 4/3) silty clay loam; few fine distinct yellowish brown (10YR 5/8) mottles; weak fine and medium subangular blocky structure; few medium iron-manganese masses; firm; many fine and medium and common coarse roots; neutral; clear smooth boundary.

Bt—6 to 12 inches; variegated yellowish brown (10YR 5/6) and light yellowish brown (10YR 6/4) silty clay loam; common fine distinct light brownish gray (10YR 6/2) iron depletions; moderate medium subangular blocky structure; few fine iron-manganese masses; firm; common fine and medium and few coarse roots; common fine faint discontinuous distinct clay films on faces of peds; about 2 percent, by volume, sandstone and chert fragments less than 3 inches in diameter; moderately acid; gradual smooth boundary.

Btss1—12 to 22 inches; variegated yellowish brown (10YR 5/4) and light brownish gray (10YR 6/2) silty clay; few fine prominent red (2.5YR 4/6) iron accumulations; moderate medium and coarse angular blocky structure; firm; few fine, medium, and coarse roots; many fine distinct continuous clay films on faces of peds; about 1 percent, by volume, sandstone and chert fragments less than 3 inches in diameter; few discontinuous distinct nonintersecting slickensides on vertical faces of peds; moderately acid; clear smooth boundary.

Btss2—22 to 37 inches; variegated gray (10YR 6/1) and strong brown (7.5YR 5/8) silty clay; common fine prominent red (2.5YR 4/8) iron accumulations; strong coarse angular blocky structure; very firm; few medium iron-manganese masses; few fine and medium roots; many fine distinct continuous clay films on faces of peds; about 2 percent, by volume, sandstone and chert fragments less than 3 inches in diameter; few discontinuous distinct nonintersecting slickensides on vertical faces of peds; slightly acid; clear smooth boundary.

Btss3—37 to 55 inches; variegated light brownish gray (10YR 6/2) and yellowish brown (10YR 5/6) clay; common fine distinct gray (10YR 6/1) iron depletions on surfaces along root channels; strong coarse angular blocky structure; very firm; common medium iron-manganese concretions; few fine and medium roots; many fine distinct continuous clay films on faces of peds; about 2 percent, by volume, sandstone and chert fragments less than 3 inches in diameter; moderately alkaline; clear wavy boundary.

Btg—55 to 80 inches; gray (2.5Y 5/1) silty clay; many medium prominent strong brown (7.5YR 5/8) iron accumulations; common medium iron-manganese masses; strong coarse angular blocky structure; very firm; many distinct continuous clay films; 20 percent, by volume, sandstone and chert fragments less than 3 inches in diameter; 5 percent, by volume, limestone fragments less than 12 inches; moderately alkaline.

Range in Characteristics

The thickness of the solum ranges from 30 to more than 60 inches. The acid Bt horizon is irregularly underlain by marl and partially weathered chalk at a depth of 30 to more than 80 inches. Reaction ranges from very strongly acid to moderately alkaline.

A horizon:

Color—hue of 10YR, value of 3 to 5, and chroma of 2 or 3

Redoximorphic features (where present)—few or common iron-manganese masses and iron accumulations

Texture—silty clay loam

Bt horizon

Color—variegated in shades of red, brown, yellow, and gray; hue of 7.5YR to 2.5Y, value of 5 or 6, and chroma of 3 to 6; or dominantly gray with brown iron accumulations

Redoximorphic features—in shades of brown, gray, and yellow

Texture of the fine-earth fraction—silty clay loam, silty clay, clay loam, or clay

Rock fragments—less than 15 percent sandstone fragments, predominantly pebbles; limestone flagstones in some pedons

Btss horizon

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 1 to 8; or, in the lower part of the horizon in some pedons, hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 or 2

Redoximorphic features (where present)—few to many that have chroma of 2 or less; variegated in shades of yellow, brown, gray, and red; or, in the lower part of the horizon in some pedons, shades of brown, yellow, and gray, most commonly on surfaces of peds or slickensides, and few to many iron-manganese masses

Texture of the fine-earth fraction—very silty clay loam, silty clay, or clay; or, in the lower part of the horizon in some pedons, silty clay loam

Rock fragments—0 to 5 percent, predominantly sandstone gravel

Btg horizon

Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2

Redoximorphic features—in shades of brown, gray, and yellow

Texture—silty clay loam, silty clay, clay loam, or clay

Rock fragments—less than 15 percent sandstone fragments, predominantly pebbles; limestone flagstones in some pedons

BC and C horizons (where present):

Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2

Redoximorphic features—in shades of brown, gray, and yellow

Texture—silty clay loam, silty clay, clay loam, or clay

Rock fragments—less than 15 percent sandstone fragments, predominantly pebbles; limestone flagstones in some pedons

Other features (in some pedons)—calcium carbonate masses and concretions and chalk fragments

Kenn Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on flood plains

Parent material: Loamy alluvium derived from sandstone

Geology: Stanley Shale

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Moderate

Slope: 0 to 3 percent

Taxonomic classification: Fine-loamy, siliceous, active, thermic Ultic Hapludalfs

Associated Soils

The Kenn series is commonly associated with Avilla, Ceda, Cupco, Dela, Neff, and Woodall soils.

Typical Pedon

Kenn cobbly fine sandy loam (fig. 20) in a forested area of Kenn-Ceda complex, 0 to 3 percent slopes, frequently flooded; NE¹/₄SE¹/₄SW¹/₄ sec. 16, T. 5 S., R. 26 W.; Pike County, Arkansas; Langley USGS topographic quadrangle; lat. 34 degrees 18 minutes 25.08 seconds N. and long. 93 degrees 47 minutes 26.56 seconds W.

A—0 to 6 inches; dark yellowish brown (10YR 4/4) cobbly fine sandy loam; weak fine granular structure; friable; many fine roots throughout; common fine low-continuity irregular pores; 20 percent rounded very strongly cemented fragments of sandstone; strongly acid; clear smooth boundary.

BA—6 to 12 inches; yellowish brown (10YR 5/6) gravelly loam; weak fine subangular blocky structure; friable; common fine roots throughout; common fine low-continuity irregular pores; 20 percent rounded very strongly cemented fragments of sandstone; strongly acid; clear smooth boundary.

Bt—12 to 28 inches; yellowish red (5YR 5/6) gravelly sandy clay loam; weak medium subangular blocky structure; friable; common fine roots throughout; 15 percent patchy faint yellowish brown (10YR 5/6) clay films on bottom faces of peds; 20 percent well rounded very strongly cemented fragments of sandstone; very strongly acid; clear wavy boundary.

2BC—28 to 42 inches; yellowish brown (10YR 5/6) very gravelly loam; weak fine subangular blocky structure; friable; few fine roots throughout; 50 percent well rounded very strongly cemented fragments of sandstone; very strongly acid; gradual wavy boundary.

2C—42 to 80 inches; yellowish brown (10YR 5/6) extremely gravelly loam; massive; friable; 70 percent well rounded very strongly cemented fragments of sandstone; very strongly acid.

Range in Characteristics

The thickness of the solum ranges from 40 to 60 inches.

A horizon:

Color—hue of 7.5YR or 10YR, value of 3 or 4, and chroma of 2 to 4

Texture—gravelly fine sandy loam, cobbly fine sandy loam, fine sandy loam, or very fine sandy loam

Rock fragments—0 to 35 percent sandstone and/or novaculite fragments less than 10 inches in diameter

Reaction—slightly acid to strongly acid, except where amendments have been applied

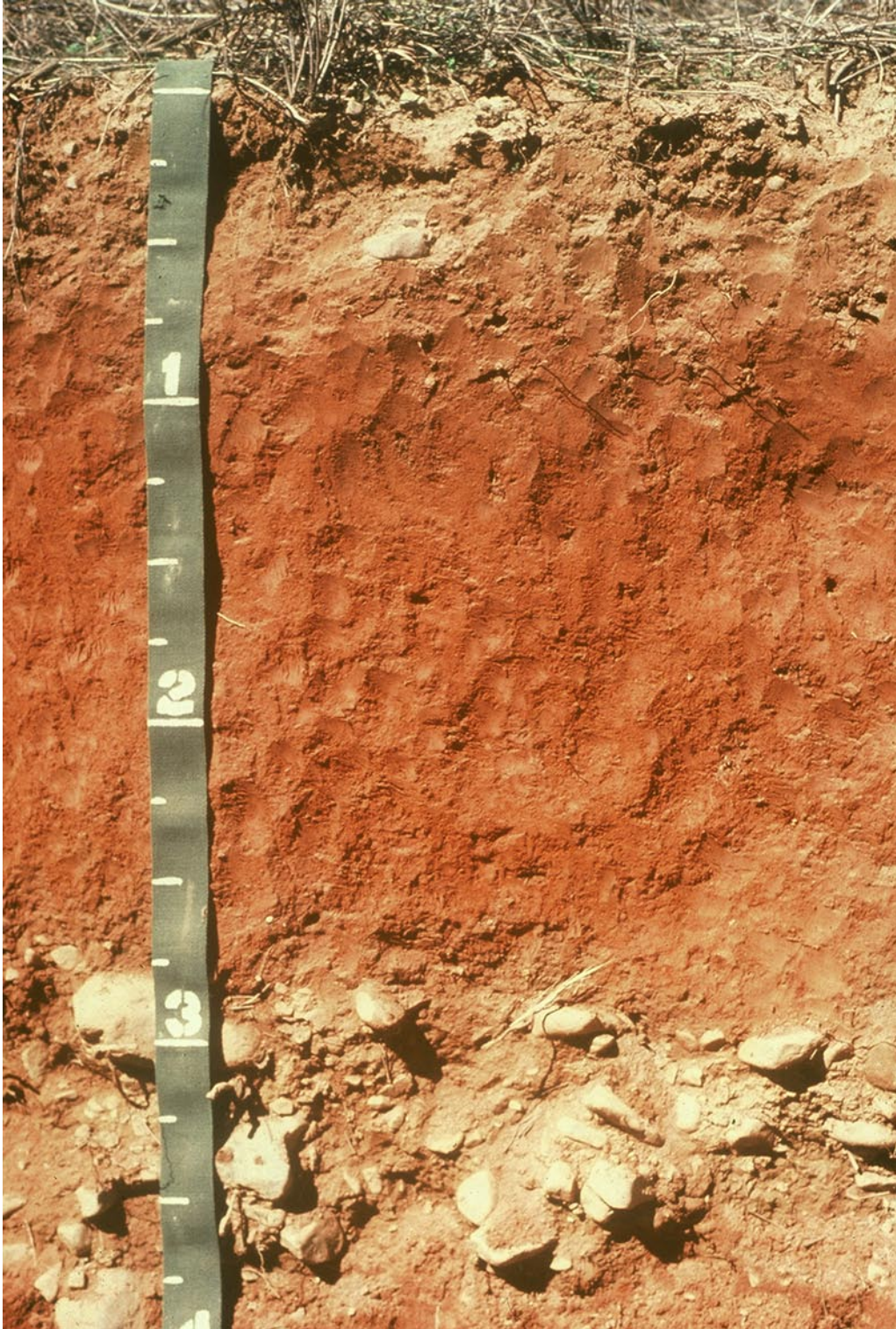


Figure 20.—Typical profile of a Kenn soil.

BA horizon:

Color—hue of 7.5YR, value of 4 or 5, and chroma of 4 to 6; or hue of 10YR, value of 5, and chroma of 4 to 6

Soil Survey of Pike County, Arkansas

Texture—loam, fine sandy loam, very fine sandy loam, or their gravelly or cobbly analogs
Rock fragments—0 to 35 percent sandstone or novaculite fragments less than 10 inches in diameter
Reaction—moderately acid or strongly acid

Bt horizon:

Color—hue of 5YR or 7.5YR, value of 4 or 5, and chroma of 4 to 6
Texture—clay loam, sandy clay loam, loam, or their gravelly analogs
Rock fragments—0 to 35 percent sandstone or novaculite fragments less than 10 inches in diameter
Reaction—strongly acid or very strongly acid

2BC horizon:

Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 3 to 8
Texture—very gravelly sandy clay loam, very cobbly sandy clay loam, very gravelly loam, or very cobbly loam
Rock fragments—35 to 60 percent sandstone and/or novaculite fragments less than 10 inches in diameter
Reaction—strongly acid or very strongly acid

2C horizon:

Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 3 to 6
Texture—extremely gravelly fine sandy loam or extremely cobbly fine sandy loam
Rock fragments—60 to 90 percent sandstone and/or novaculite fragments less than 10 inches in diameter
Reaction—strongly acid to extremely acid

Kizzia Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Interfluves

Position on the landscape: Linear-convex areas on interfluves and crests

Parent material: Loamy marine deposits

Geology: Trinity Group

Drainage class: Moderately well drained

Permeability: Moderate

Soil depth class: Moderately deep to a fragipan

Shrink-swell potential: Low

Slope: 3 to 8 percent

Taxonomic classification: Fine-loamy, siliceous, semiactive, thermic Typic Fragiudults

Associated Soils

The Kizzia series is commonly associated with McCaskill, Nathan, and Tiak soils.

Typical Pedon

Kizzia silt loam, 3 to 8 percent slopes; in an area of native grasses and cedar trees; SW¹/₄NW¹/₄NE¹/₄ sec. 1, T. 8 S., R. 25 W.; Pike County, Arkansas; Delight USGS topographic quadrangle; lat. 34 degrees 5 minutes 12.00 seconds N. and long. 93 degrees 37 minutes 5.00 seconds W.

A—0 to 4 inches; brown (10YR 4/3) silt loam; weak fine granular structure; very friable; common fine, common medium, common coarse, common very coarse, and common very fine roots throughout; 3 percent subrounded 0.1- to 3.0-inch fragments of sandstone; moderately acid; clear smooth boundary.

- BA—4 to 7 inches; dark brown (7.5YR 3/4) silt loam; weak fine subangular blocky structure; friable; common fine, common medium, common coarse, common very coarse, and common very fine roots throughout; 3 percent subrounded 0.1- to 3.0-inch fragments of sandstone; slightly acid; clear smooth boundary.
- Bt1—7 to 12 inches; strong brown (7.5YR 4/6) silt loam; 5 percent fine faint brown (10YR 5/3) mottles; weak fine and medium subangular blocky structure; friable; common fine, common medium, common coarse, and common very fine roots throughout; 3 percent patchy faint clay films on bottom faces of peds; 30 percent medium iron-manganese concretions; 10 percent fine and medium manganese masses; 4 percent subrounded 0.1- to 3.0-inch fragments of sandstone; slightly acid; clear smooth boundary.
- Bt2—12 to 36 inches; red (2.5YR 4/6) loam; 5 percent fine faint brown (10YR 5/3) mottles; moderate medium subangular blocky structure; friable; common fine, common medium, and common very fine roots throughout; 10 percent patchy distinct clay films on bottom faces of peds; 5 percent medium manganese masses; 5 percent coarse iron-manganese concretions; 1 percent fine iron-manganese concretions; 3 percent subrounded 0.1- to 3.0-inch fragments of sandstone; neutral; gradual wavy boundary.
- Btx—36 to 80 inches; dark yellowish brown (10YR 4/6), light gray (10YR 7/1), and yellowish brown (10YR 5/6) loam; weak coarse prismatic structure parting to moderate medium angular blocky; firm; 10 percent discontinuous distinct clay films on faces of peds; 10 percent very coarse iron-manganese concretions; 5 percent fine iron-manganese concretions; 5 percent medium pale brown (10YR 6/3) iron-manganese concretions; 5 percent coarse iron-manganese concretions; very strongly acid.

Range in Characteristics

Depth to fragipan ranges from 24 to 40 inches. Reaction ranges from very strongly acid to neutral, except where lime has been applied.

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4
Texture—silt loam
Rock fragments—0 to 5 percent

BA horizon:

Color—hue of 7.5YR, value of 3 or 4, and chroma of 4 to 6
Texture—fine sandy loam, very fine sandy loam, or silt loam
Rock fragments—0 to 5 percent

Bt horizon:

Color—hue of 2.5YR to 7.5YR, value of 4 to 6, and chroma of 6 to 8
Redoximorphic features (where present)—few to many, including black and brown manganese concretions and masses
Texture—loam, clay loam, sandy clay loam, or very fine sandy loam
Rock fragments—0 to 5 percent

Btx horizon:

Color—typically variegated in shades of yellow, brown, gray, and red; or a brown and red matrix with redoximorphic features in shades of gray, yellow, and red
Redoximorphic features—in shades of gray, yellow, and red and few to many black and brown manganese concretions and masses
Texture—sandy clay loam, clay loam, loam, very fine sandy loam, or fine sandy loam
Rock fragments—0 to 5 percent
Other features—the matrix of the prisms is very firm when dry and brittle. It constitutes more than 65 percent of the volume.

Leeper Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Flood plains

Position on the landscape: Linear-concave areas on treads of flood-plain steps

Parent material: Clayey alluvium

Geology: Alluvium

Drainage class: Somewhat poorly drained

Permeability: Very slow or impermeable

Soil depth class: Very deep

Shrink-swell potential: High

Slope: 0 to 3 percent

Taxonomic classification: Fine, smectitic, nonacid, thermic Vertic Haplaquepts

Associated Soils

The Leeper series is commonly associated with Marietta and Una soils.

Typical Pedon

Leeper silty clay loam, 0 to 2 percent slopes, occasionally flooded; in a pasture; NE¹/₄ SE¹/₄ SE¹/₄ sec. 18, T. 9 S., R. 23 W.; Pike County, Arkansas; Piney Grove USGS topographic quadrangle; lat. 33 degrees 57 minutes 36.80 seconds N. and long. 93 degrees 29 minutes 33.80 seconds W.

Ap1—0 to 3 inches; dark grayish brown (10YR 4/2) silty clay loam; moderate medium granular structure; firm, slightly sticky, slightly plastic; slightly acid; abrupt smooth boundary.

Ap2—3 to 10 inches; dark grayish brown (10YR 4/2) silty clay; moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; moderately acid; clear wavy boundary.

Bw—10 to 51 inches; gray (10YR 5/1) clay; moderate medium subangular and angular blocky structure; very firm, very sticky, very plastic; many medium distinct brownish yellow (10YR 6/8) masses of oxidized iron; strongly acid; clear smooth boundary.

Cg—51 to 97 inches; gray (10YR 5/1) clay; massive; very firm, very sticky, very plastic; 30 percent medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; 2 percent medium white (10YR 8/1) carbonate masses; moderately alkaline.

Range in Characteristics

The thickness of the solum ranges from 20 to more than 60 inches. Reaction ranges from moderately acid to moderately alkaline.

A or Ap horizon:

Color—dominantly hue of 10YR, value of 4, and chroma of 1 or 2; in some pedons where the horizon is less than 6 inches thick, hue of 10YR, value of 3 and chroma of 1

Texture—silty clay loam

Reaction—moderately acid to neutral

B horizon or upper part of the B horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 1 or 2

Redoximorphic features—few to many in shades of brown or gray and few to many brown and black concretions; or no dominant color and variegated in shades of brown, red, and gray

Texture—silty clay or clay

Reaction—moderately acid to moderately alkaline

Lower part of the B horizon (where present):

Color—hue of 10YR, value of 4 or 5, and chroma of 1

Redoximorphic features—few to many in shades of brown and yellow and few to many brown and black concretions

Texture—clay

Reaction—moderately acid to moderately alkaline

Cg horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 1 or 2; or variegated in shades of gray, yellow, or brown

Redoximorphic features—few to many brown and black concretions

Texture—clay, silty clay, silty clay loam, or clay loam

Calcium carbonate (where present)—few nodules

Reaction—moderately acid to moderately alkaline

Rock fragments—0 to 60 percent sandstone fragments less than 3 inches in diameter below a depth of 60 inches

Littlefir Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Hillsides

Position on the landscape: Convex areas on summits and linear-convex areas on shoulders and backslopes

Parent material: Clayey residuum weathered from shale and sandstone

Geology: Stanley Shale

Drainage class: Moderately well drained

Permeability: Slow

Soil depth class: Moderately deep to paralithic bedrock

Shrink-swell potential: High

Slope: 1 to 35 percent

Taxonomic classification: Fine, mixed, semiactive, thermic Oxyaquic Hapludults

Associated Soils

The Littlefir series is commonly associated with Bismarck, Carnasaw, Mazarn, Nashoba, and Sherless soils.

Typical Pedon

Littlefir cobbly fine sandy loam (fig. 21) in a forested area of Sherless-Littlefir-Nashoba complex, 15 to 35 percent slopes; NW¹/₄NW¹/₄SE¹/₄ sec. 23, T. 5 S., R. 27 W.; Pike County, Arkansas; Langley USGS topographic quadrangle; lat. 34 degrees 17 minutes 48.45 seconds N. and long. 93 degrees 51 minutes 23.41 seconds W.

A—0 to 3 inches; dark grayish brown (10YR 4/2) cobbly fine sandy loam; weak fine granular structure; friable; 15 percent subangular strongly cemented fragments of sandstone; strongly acid; clear smooth boundary.

E—3 to 9 inches; yellowish brown (10YR 5/4) fine sandy loam; weak fine subangular blocky structure; friable; 10 percent subangular strongly cemented fragments of sandstone; strongly acid; gradual smooth boundary.

Bt1—9 to 22 inches; red (2.5YR 4/8) silty clay; strong medium subangular blocky structure; firm, slightly sticky, slightly plastic; 40 percent continuous distinct yellowish red (5YR 4/6) clay films on faces of peds; very strongly acid; clear smooth boundary.

Bt2—22 to 35 inches; red (2.5YR 4/8) silty clay; strong coarse angular blocky structure; firm, slightly sticky, slightly plastic; 60 percent continuous distinct yellowish red (5YR 4/6) clay films on faces of peds; 15 percent fine prominent strong brown (7.5YR 5/6) iron depletions on faces of peds with clear boundaries;



Figure 21.—Typical profile of a Littlefir soil.

15 percent fine prominent light brownish gray (10YR 6/2) iron depletions on faces of peds with clear boundaries; very strongly acid; clear wavy boundary.
BC—35 to 43 inches; red (2.5YR 4/8) very channery clay; strong coarse angular blocky structure; firm, slightly sticky, slightly plastic; 15 percent fine prominent light brownish gray (10YR 6/2) iron depletions on faces of peds with clear boundaries; 15 percent fine prominent strong brown (7.5YR 5/6) iron depletions on faces of peds with clear boundaries; 50 percent flat angular weakly acid fragments of shale; strongly acid; diffuse irregular boundary.
Cr—43 to 50 inches; red, gray, and strong brown, fractured, tilted, soft, acid shale and sandstone that are interbedded.

Range in Characteristics

The thickness of the solum ranges from 20 to 50 inches. It is extremely variable within short distances due to the irregular boundary between the lower part of the Bt horizon or the BC horizon and the underlying bedrock.

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4

Texture—gravelly silt loam, very gravelly silt loam, cobbly silt loam, very cobbly silt loam, gravelly loam, cobbly loam, gravelly fine sandy loam, or cobbly fine sandy loam

Rock fragments—0 to 60 percent sandstone and/or quartzite fragments up to 10 inches in diameter or shale fragments less than 6 inches in length

Reaction—slightly acid to strongly acid, except where amendments have been applied

E horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4

Soil Survey of Pike County, Arkansas

Texture—fine sandy loam, silt loam, loam, or their channery, very channery, gravelly, very gravelly, or cobbly analogs
Rock fragments—0 to 35 percent sandstone and/or quartzite fragments up to 10 inches in diameter or shale fragments less than 6 inches in length
Reaction—slightly acid to very strongly acid

BA or BE horizon (where present):

Color—hue of 10YR, value of 5, and chroma of 6 to 8; hue of 7.5YR, value of 4, and chroma of 4 to 6; or hue of 7.5YR, value of 5, and chroma of 6 to 8
Texture—silt loam or gravelly silt loam
Rock fragments—0 to 35 percent sandstone and/or quartzite fragments up to 10 inches in diameter or shale fragments less than 6 inches in length
Reaction—slightly acid to very strongly acid

Upper part of the Bt horizon:

Color—hue of 2.5YR or 5YR, value of 4 to 6, and chroma of 6 to 8; or hue of 7.5YR, value of 5, and chroma of 6 to 8
Texture—silty clay loam, clay loam, silty clay, clay, or their channery or gravelly analogs
Rock fragments—0 to 35 percent sandstone and/or quartzite fragments up to 10 inches in diameter or shale fragments less than 6 inches in length. Pockets of partially weathered sandstone are in some pedons.
Reaction—moderately acid to very strongly acid

Lower part of the Bt horizon:

Color—hue of 2.5YR or 5YR, value of 4 to 6, and chroma of 6 to 8; or no dominant matrix hue and variegated in shades of brown, yellow, and gray
Texture—silty clay loam, clay loam, silty clay, clay, or their gravelly, very gravelly, channery, or very channery analogs
Rock fragments—0 to 60 percent sandstone and/or quartzite fragments up to 3 inches in diameter or shale fragments less than 6 inches in length. Some pedons contain lenses of soft sandstone.
Reaction—moderately acid to extremely acid

BC horizon:

Color—hue of 2.5YR or 5YR, value of 4 to 6, and chroma of 6 to 8; or no dominant matrix hue and variegated in shades of red, brown, yellow, and gray
Texture—channery clay loam, channery silty clay loam, channery silty clay, very channery clay loam, very channery silty clay loam, very channery silty clay, extremely channery clay loam, extremely channery silty clay loam, or extremely channery silty clay
Rock fragments—15 to 70 percent shale fragments less than 6 inches in length
Reaction—strongly acid to extremely acid

Cr horizon:

This horizon consists of soft, acid shale. In some pedons, it has thin strata of interbedded sandstone and/or siltstone. Typically, this horizon is fractured and tilted. Colors include shades of red, brown, yellow, and gray. In some pedons, this horizon contains seams and/or pockets of soil material at a depth of more than 50 inches.

Magnet Series Variant

This soil is a variant to the Magnet series because it has more olive brown colors in the Bt horizon than is definitive for the series. There is only one delineation of this map unit in Pike County. The delineation is about 80 acres. This area is underlain primarily by lamproite, an igneous rock from which diamonds have been mined.

Soil Survey of Pike County, Arkansas

The Magnet series was established in areas of igneous rock intrusions along the contact of the Ouachita Mountains and the Cretaceous Western Coastal Plain.

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Interfluves

Position on the landscape: Linear-convex areas on backslopes

Parent Material: Clayey residuum from lamproite, syenite, and other intrusive igneous rocks

Geology: Trinity Group

Drainage class: Moderately well drained

Permeability: Moderately slow

Soil depth class: Moderately deep to paralithic contact

Shrink-swell potential: Low

Slope: 15 to 35 percent

Taxonomic classification: Fine, mixed, active, thermic Ultic Hapludalfs

Associated Soils

The Magnet series variant is commonly associated with Pikecity and Nathan soils.

Typical Pedon

Magnet variant cobbly silt loam, 15 to 35 percent slopes; in an open field; NE¹/₄NE¹/₄ NW¹/₄ sec. 28, T. 8 S., R. 25 W.; Pike County, Arkansas; Murfreesboro USGS topographic quadrangle; lat. 34 degrees 2 minutes 5.30 seconds N. and long. 93 degrees 40 minutes 25.2 seconds W.

A—0 to 8 inches; dark grayish brown (10YR 4/2) cobbly silt loam; moderate medium granular structure; friable; common fine, common medium, common coarse, common very coarse, and common very fine roots throughout; 15 percent subangular 10.0 to 25.0-inch fragments of sandstone and lamproite; moderately acid; clear smooth boundary.

Bt1—8 to 23 inches; dark brown (2.5Y 4/4) cobbly clay; moderate medium subangular blocky structure; firm; common fine, common medium, common coarse, common very coarse, and common very fine roots throughout; many distinct clay films on ped surfaces; 15 percent angular 3.0 to 10.0-inch fragments of sandstone and lamproite; strongly acid; gradual wavy boundary.

Bt2—23 to 31 inches; strong brown (2.5Y 4/4) cobbly clay loam; moderate medium subangular blocky structure; firm; common fine, common medium, common coarse, and common very fine roots throughout; common distinct clay films on bottom faces of peds; 15 percent angular 3.0 to 10.0-inch fragments of sandstone and lamproite; slightly acid; gradual wavy boundary.

Cr—31 to 72 inches; light olive brown, soft lamproite.

Range in Characteristics

The thickness of the solum and depth to soft, weathered bedrock range from 20 to 50 inches. They are extremely variable within short distances. Depth to hard bedrock is more than 60 inches. Reaction ranges from slightly acid to strongly acid throughout. The content of coarse fragments ranges from 0 to 30 percent throughout.

A horizon:

Color—hue of 10YR, value of 2 to 4, and chroma of 2

Texture—stony loam

Bt horizon:

Color—hue of 2.5Y, value of 4 or 5, and chroma of 3 or 4

Texture—cobbly clay loam, cobbly clay, cobbly silty clay, gravelly clay loam, or gravelly silty clay loam

Cr horizon:

This horizon is extremely variable over short distances. It consists dominantly of soft, multicolored lamproite or syenitic saprolite and other igneous rocks of variable mineral composition.

Marietta Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on treads of flood-plain steps

Parent material: Clayey alluvium

Geology: Brownstown Marl

Drainage class: Moderately well drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Moderate

Slope: 0 to 2 percent

Taxonomic classification: Fine-loamy, siliceous, active, thermic Fluvaquentic
Eutrudepts

Associated Soils

The Marietta series is commonly associated with Leeper and Una soils.

Typical Pedon

Marietta loam, 0 to 2 percent slopes, occasionally flooded; in a forested area; NE¹/₄ SE¹/₄NE¹/₄ sec. 12, T. 9 S., R. 24 W.; Pike County, Arkansas; Pisgah USGS topographic quadrangle; lat. 33 degrees 58 minutes 57.17 seconds N. and long. 93 degrees 30 minutes 34.47 seconds W.

A—0 to 16 inches; dark grayish brown (10YR 4/2) loam; weak fine granular structure; friable; neutral; clear smooth boundary.

Bw1—16 to 29 inches; light olive brown (2.5Y 5/4) silty clay loam; weak medium subangular blocky structure; firm; neutral; gradual smooth boundary.

Bw2—29 to 57 inches; light olive brown (2.5Y 5/4) silty clay loam; weak medium subangular blocky structure; firm; 1 percent fine prominent irregular light brownish gray (10YR 6/2) iron depletions; neutral; clear smooth boundary.

Bw3—57 to 72 inches; yellowish brown (10YR 5/6) silty clay loam; weak medium subangular blocky structure; firm; 10 percent medium prominent irregular light brownish gray (10YR 6/2) iron depletions; moderately alkaline; gradual smooth boundary.

Cg—72 to 85 inches; light brownish gray (10YR 6/2) silty clay loam; massive; firm; 10 percent medium prominent irregular strong brown (7.5YR 5/6) masses of oxidized iron; 10 percent fine iron-manganese concretions; moderately alkaline.

Range in Characteristics

The thickness of the solum ranges from 28 to 60 inches. Reaction ranges from moderately acid to slightly alkaline, except in the surface layer where lime has been applied.

A horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 2

Texture—loam

Upper part of the Bw horizon:

Color—hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 3 or 4

Redoximorphic features—having chroma of 2 or less within a depth of 24 inches, commonly increasing in size and abundance with depth

Texture—silty clay loam, clay loam, sandy clay loam, loam, or silt loam

Lower part of the Bw horizon:

Color—commonly variegated in shades of brown, yellow, and gray; or hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2

Redoximorphic features—in shades of brown, yellow, and gray. In some pedons, few to many black concretions are in the lower part of the B horizon.

Texture—silty clay loam, clay loam, sandy clay loam, loam, or silt loam

Reaction—neutral to very strongly acid

Cg horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 1 or 2

Redoximorphic features—in shades of brown, yellow, and gray or variegated in shades of brown, yellow, and gray; few or common fine to coarse black concretions

Texture—silty clay loam or silty clay

Calcium carbonate (where present)—few nodules

Reaction—neutral to alkaline

Mazarn Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Concave open depressions

Position on the landscape: Concave areas on base slopes

Parent material: Loamy slope alluvium derived from sandstone and shale

Geology: Stanley Shale

Drainage class: Somewhat poorly drained

Permeability: Moderately slow

Soil depth class: Moderately deep to paralithic bedrock

Shrink-swell potential: Low

Slope: 0 to 3 percent

Taxonomic classification: Fine-loamy, siliceous, semiactive, thermic Aquic Hapludults

Associated Soils

The Mazarn series is commonly associated with Bismarck, Littlefir, Nashoba, Pirum, and Sherless soils.

Typical Pedon

Mazarn silt loam, 0 to 3 percent slopes (fig. 22); in a pasture; SE¹/₄SW¹/₄SE¹/₄ sec. 8, T. 5 S., R. 25 W.; Pike County, Arkansas; lat. 34 degrees 19 minutes 0.28 second N. and long. 93 degrees 41 minutes 41.87 seconds W.

Ap—0 to 4 inches; dark grayish brown (10YR 4/2) silt loam; weak medium granular structure; friable; strongly acid; abrupt smooth boundary.

BA—4 to 10 inches; yellowish brown (10YR 5/6) silt loam; weak fine subangular blocky structure; friable; 10 percent medium faint iron depletions throughout with clear boundaries; strongly acid; clear smooth boundary.

Bt1—10 to 21 inches; yellowish brown (10YR 5/6) silty clay loam; moderate medium subangular blocky structure; firm; 40 percent discontinuous faint light yellowish brown (10YR 6/4) clay films on faces of peds; 30 percent coarse distinct iron depletions throughout with clear boundaries; strongly acid; clear smooth boundary.

Bt2—21 to 36 inches; light brownish gray (10YR 6/2) silty clay loam; moderate medium subangular blocky structure; firm; 40 percent discontinuous faint light yellowish



Figure 22.—Typical profile of a Mazarn soil.

brown (10YR 6/4) clay films on faces of peds; 15 percent medium distinct very weakly cemented masses of oxidized iron on faces of peds with clear boundaries; 10 percent flat very angular weakly acid fragments of shale; strongly acid; abrupt irregular boundary.

2Cr—36 to 40 inches; soft, acid shale that is tilted and fractured and is laminated with seams of loamy and clayey soil material between the fractures.

Range in Characteristics

The thickness of the solum and depth to bedrock range from 20 to 40 inches. They are variable within short distances due to the irregular boundary between the lower part of the Bt horizon and the underlying tilted bedrock.

A or Ap horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 2 to 4

Texture—silt loam

Reaction—slightly acid to very strongly acid, except where amendments have been applied

BA horizon:

Color—hue of 10YR, value of 4 to 6, and chroma of 3 or 4; or hue of 2.5Y, value of 5 or 6, and chroma of 2 or 4

Texture—silt loam or loam

Reaction—slightly acid to very strongly acid

Bt1 horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4; or hue of 2.5Y, value of 5 or 6, and chroma of 4 to 6

Texture—silt loam, silty clay loam, or loam

Redoximorphic features—accumulations and depletions in shades of brown, yellow, gray, and red

Reaction—strongly acid or very strongly acid

Bt2 horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 2 to 8; hue of 2.5Y, value of 5 or 6, and chroma of 4 to 6; or no dominant matrix hue and variegated in shades of brown, yellow, and gray

Texture—silt loam, silty clay loam, or loam

Redoximorphic features—accumulations and depletions in shades of brown, yellow, gray, and red

Rock fragments—0 to 35 percent sandstone fragments less than 3 inches in diameter and/or shale fragments less than 6 inches in length

Reaction—strongly acid or very strongly acid

2Bt3 horizon (where present):

Color—in most pedons, no dominant matrix hue and variegated in shades of brown, yellow, and gray; or hue of 10YR, value of 5 or 6, and chroma of 2; or hue of 2.5Y, value of 5 or 6, and chroma of 2 or 4

Texture—silty clay loam, silt loam, loam, or silty clay

Redoximorphic features—accumulations and depletions in shades of brown, yellow, gray, and red

Rock fragments—0 to 35 percent sandstone fragments less than 3 inches in diameter and/or shale fragments less than 6 inches in length. Some fragments are subrounded or rounded.

Reaction—strongly acid or very strongly acid

2Cr horizon:

This horizon consists of gray, brown, and red shale that is soft and weakly cemented. Typically, it has thin strata of interbedded sandstone and/or siltstone. Beds are fractured and, in some pedons, contain 5 to 10 percent seams of soil material between the fractures and at depths of more than 40 inches.

McCaskill Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Interfluves

Position on the landscape: Linear-concave areas on interfluves

Parent material: Coarse-loamy marine deposits

Geology: Tokio Formation

Drainage class: Somewhat poorly drained

Permeability: Moderately slow

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 0 to 2 percent

Taxonomic classification: Coarse-loamy, mixed, semiactive, thermic Aquic Paleudults

Associated Soils

The McCaskill series is commonly associated with Gurdon, Smithton, and Stelltown soils.

Typical Pedon

McCaskill fine sandy loam, 0 to 2 percent slopes; in a pasture; SE¹/₄NE¹/₄SW¹/₄ sec. 9, T. 9 S., R. 24 W.; Pike County, Arkansas; Pisgah USGS topographic quadrangle; lat. 33 degrees 58 minutes 38.94 seconds N. and long. 93 degrees 34 minutes 19.08 seconds W.

- A—0 to 4 inches; dark grayish brown (10YR 4/2) fine sandy loam; weak fine subangular blocky structure; friable; 5 percent fine faint dark yellowish brown (10YR 4/4) masses of oxidized iron; moderately acid; clear smooth boundary.
- E—4 to 13 inches; light brownish gray (10YR 6/2) fine sandy loam; weak fine subangular blocky structure; friable; 25 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; 10 percent rounded 0.2- to 3.0-inch fragments of quartzite; moderately acid; clear smooth boundary.
- Bt1—13 to 23 inches; light yellowish brown (10YR 6/4) loam; moderate medium subangular blocky structure; friable; 10 percent patchy distinct clay films on bottom faces of peds; 25 percent medium distinct gray (10YR 6/1) iron depletions; 10 percent medium distinct yellowish brown (10YR 5/8) masses of oxidized iron; 1 percent medium distinct strong brown (7.5YR 5/8) masses of oxidized iron; 2 percent rounded 0.2- to 3.0-inch fragments of quartzite; very strongly acid; gradual smooth boundary.
- Bt2—23 to 37 inches; light yellowish brown (10YR 6/4) and gray (10YR 6/1) loam; moderate medium subangular blocky structure; friable; 10 percent, by volume, krotovinas; 10 percent patchy distinct clay films on bottom faces of peds; 30 percent medium faint yellowish brown (10YR 5/8) masses of oxidized iron; 2 percent rounded 0.2- to 3.0-inch fragments of quartzite; very strongly acid; gradual smooth boundary.
- Bt3—37 to 61 inches; light gray (10YR 7/1) and yellowish brown (10YR 5/8) sandy clay loam; moderate medium subangular blocky structure; firm; 10 percent, by volume, krotovinas; 10 percent patchy distinct clay films on bottom faces of peds; 10 percent fine prominent irregular dark red (2.5YR 3/6) masses of oxidized iron; 5 percent rounded 0.2- to 3.0-inch fragments of quartzite and 5 percent rounded 0.2- to 3.0-inch plinthite nodules; very strongly acid; clear irregular boundary.
- Bt4—61 to 80 inches; gray (10YR 6/1) sandy clay loam; moderate medium subangular blocky structure; firm; 10 percent, by volume, krotovinas; 30 percent discontinuous distinct clay films on bottom faces of peds; 25 percent coarse prominent red (2.5YR 4/6) masses of oxidized iron; 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; 2 percent rounded 0.2- to 3.0-inch fragments

of quartzite and 10 percent rounded 0.2- to 3.0-inch plinthite nodules; about 30 percent of this horizon is slightly brittle; very strongly acid.

Range in Characteristics

The solum is more than 60 inches thick. Reaction ranges from very strongly acid to slightly acid throughout, except in areas where the surface layer has been limed. The control section (the upper 20 inches of the B horizon) has 8 to 12 percent clay and more than 50 percent silt. In some pedons, the Bt horizon has fragic properties, which occur in less than 30 percent of the mass.

A horizon:

Color—hue of 10YR, value of 4 to 6, and chroma of 2 or 3; or hue of 10YR, value of 6, and chroma of 1

Redoximorphic features (where present)—few in shades of yellowish brown or dark yellowish brown

Texture—fine sandy loam

E horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 2 or 3; or hue of 10YR, value of 5, and chroma of 6

Texture—silt loam or fine sandy loam

Bt1 horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 4 to 6

Redoximorphic features—many, common, or few yellowish brown to strong brown iron accumulations; common, few or no pale brown iron depletions; and many, common, or few gray iron depletions

Texture—silt loam, fine sandy loam, loam, sandy clay loam, and loam

Bt2 horizon:

Color—hue of 10YR, value of 5, and chroma of 6; or variegated in shades of brownish yellow and gray

Redoximorphic features—many, common, few, or no yellowish brown to strong brown iron accumulations; common, few or no pale brown iron depletions; and many, common, or few gray iron depletions

Texture—silt loam, fine sandy loam, loam, sandy clay loam, and loam

Bt3 horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 1 to 8; or variegated in shades of yellowish brown and gray

Redoximorphic features—common, few or no yellowish brown to dark red iron accumulations and many, common, or few gray iron depletions

Texture—silt loam, fine sandy loam, loam, and sandy clay loam

Bt4 horizon

Color—hue of 10YR, value of 6, and chroma of 1

Redoximorphic features (where present)—many, common, or few reddish brown iron accumulations and common or few yellowish brown iron accumulations

Texture—loam or sandy clay loam

Mena Series

Major land resource area: 119—Ouachita Mountains

Local physiographic area: Lodi

Geomorphic setting: Strath terraces

Position on the landscape: Linear areas on treads and linear-convex areas on risers

Parent material: Clayey pedisegment derived from sandstone and shale

Soil Survey of Pike County, Arkansas

Geology: Stanley Shale

Drainage class: Moderately well drained

Permeability: Moderately slow

Soil depth class: Very deep

Shrink-swell potential: Moderate

Slope: 1 to 12 percent

Taxonomic classification: Fine, mixed, semiactive, thermic Aquic Paleudults

Associated Soils

The Mena series is commonly associated with Avilla, Bismarck, Carnasaw, Nashoba, and Sherless soils.

Typical Pedon

Mena silt loam, 1 to 6 percent slopes; in a pasture; SE¹/₄SE¹/₄SW¹/₄ sec. 8, T. 5 S., R. 25 W.; Pike County, Arkansas; Lodi USGS topographic quadrangle; lat. 34 degrees 19 minutes 1.75 seconds N. and long. 93 degrees 42 minutes 1.26 seconds W.

Ap—0 to 5 inches; brown (7.5YR 4/4) silt loam; weak fine granular structure; friable; strongly acid; abrupt smooth boundary.

Bt1—5 to 12 inches; yellowish red (5YR 4/6) loam; weak medium subangular blocky structure; friable; 10 percent patchy distinct strong brown (7.5YR 4/6) clay films on bottom faces of peds; strongly acid; clear smooth boundary.

Bt2—12 to 19 inches; red (2.5YR 4/8) silty clay loam; moderate medium subangular blocky structure; firm, slightly sticky; 30 percent discontinuous distinct yellowish red (5YR 4/6) clay films on faces of peds; strongly acid; clear smooth boundary.

Bt3—19 to 31 inches; red (2.5YR 4/6) silty clay; strong medium angular blocky structure; very firm, slightly sticky; 40 percent continuous faint dark red (2.5YR 3/6) clay films on faces of peds; 5 percent rounded very strongly cemented fragments of sandstone; very strongly acid; clear wavy boundary.

2Bt4—31 to 62 inches; red (2.5YR 4/8) gravelly silty clay; strong coarse angular blocky structure; very firm, slightly sticky; 60 percent continuous faint clay films on faces of peds; 10 percent fine prominent light brownish gray (10YR 6/2) iron depletions; very strongly acid; gradual wavy boundary.

3Cr—62 to 80 inches; red, gray, and strong brown, interbedded soft, acid sandstone and shale that are fractured and tilted more than 20 degrees from the horizontal.

Range in Characteristics

The thickness of the solum and depth to soft bedrock range from 60 to more than 80 inches. Reaction ranges from moderately acid to very strongly acid in the A and BA horizons and from strongly acid to extremely acid in the Bt, 2Bt, and 2BC horizons. The content of coarse fragments ranges from 0 to 35 percent, by volume, in the A and BA horizons, from 0 to 15 percent in the Bt horizon, and from 15 to 60 percent in the 2Bt and 2BC horizons. Depth to the lithological discontinuity ranges from 30 to 60 inches.

A or Ap horizon:

Color—hue of 10YR, value of 4, and chroma of 2 to 4; hue of 7.5YR, value of 4, and chroma of 4; or, in some pedons where the horizon is less than 6 inches thick, hue of 10YR, value of 3, and chroma of 3

Texture—silt loam

BA horizon (where present):

Color—hue of 10YR, value of 5 or 6, and chroma of 4 to 8; or hue of 7.5YR, value of 4 to 6, and chroma of 4 to 8

Texture—silt loam, loam, gravelly silt loam, or gravelly loam

Upper part of the Bt horizon:

Color—hue of 7.5YR, value of 5, and chroma of 6 to 8; or hue of 5YR or 2.5YR, value of 4 or 5, and chroma of 4 to 8
Redoximorphic features (where present)—few or common iron accumulations and depletions in shades of brown or red
Texture—silt loam, silty clay loam, clay loam, silty clay, or clay

Lower part of the Bt horizon:

Color—hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 4 to 8
Redoximorphic features—iron accumulations and depletions in shades of brown, red, or gray
Texture—silty clay loam, silty clay, or clay

2Bt and 2BC horizons (where present):

Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 4 to 8
Redoximorphic features—iron accumulations and depletions in shades of red, brown or gray. In some pedons, the horizon has no dominant matrix color and is mottled in shades of red, brown, and gray.
Texture—gravelly, very gravelly, very channery, cobbly, or very cobbly analogs of clay loam, silty clay, or clay

3Cr horizon:

This horizon consists of gray, soft, weathered, shale bedrock or interbedded shale and sandstone bedrock tilted more than 20 degrees from horizontal.

Murfreesboro Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Stream terraces

Position on the landscape: Linear-convex areas on treads

Parent material: Loamy alluvium

Geology: Alluvium

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Moderate

Slope: 1 to 6 percent

Taxonomic classification: Fine-loamy, siliceous, semiactive, thermic Typic Hapludults

Associated Soils

The Murfreesboro series is commonly associated with Gurdon, Guyton, Pikecreek, Smithton, and Vaughn soils.

Typical Pedon

Murfreesboro loam, 1 to 6 percent slopes; in a pasture; NE¹/₄SE¹/₄NW¹/₄ sec. 17, T. 8 S., R. 25 W.; Pike County, Arkansas; Murfreesboro USGS topographic quadrangle; lat. 34 degrees 3 minutes 36.49 seconds N. and long. 93 degrees 41 minutes 34.85 seconds W.

A—0 to 6 inches; dark grayish brown (10YR 4/2) loam; moderate fine and medium granular structure; friable; common fine roots throughout; common fine and medium pores; 10 percent subrounded fragments of sandstone; moderately alkaline; abrupt smooth boundary.

Bt1—6 to 31 inches; red (2.5YR 4/8) clay loam; weak fine and medium subangular blocky structure; firm; few fine roots throughout; common very fine and fine pores; 25 percent faint red (2.5YR 4/8) clay films on surfaces along pores; 15 percent subrounded fragments of sandstone; neutral; clear smooth boundary.

Bt2—31 to 42 inches; red (2.5YR 4/8) clay loam; moderate fine and medium subangular blocky structure; firm; few fine and medium roots throughout; common fine pores; 3 percent faint red (2.5YR 4/8) clay films on surfaces along pores; 10 percent medium prominent light brownish gray (10YR 6/2) iron depletions; slightly acid; clear wavy boundary.

BC—42 to 80 inches; variegated red (2.5YR 4/8) and light red (2.5YR 6/6) loam; weak medium and coarse subangular blocky structure; friable; few fine roots throughout; common fine pores; 25 percent medium and coarse prominent light brownish gray (10YR 6/2) iron depletions; strongly acid.

Range in Characteristics

The thickness of the solum ranges from 60 to more than 80 inches. Reaction ranges from neutral to very strongly acid throughout, except in the surface layer where lime has been applied. The content of sandstone fragments less than 3 inches in diameter ranges from 0 to 35 percent, by volume, in the A, E, and Bt horizons and from 0 to 60 percent in the BC horizon.

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4

Texture—loam or gravelly loam

E horizon (where present):

Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4

Texture—fine sandy loam, loam, gravelly fine sandy loam, or gravelly loam

BE horizon (where present):

Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 4 to 6

Texture—fine sandy loam, loam, gravelly fine sandy loam, or gravelly loam

Bt1 horizon:

Color—hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 6 to 8; or hue of 10YR, value of 5, and chroma of 6 to 8

Texture—loam, clay loam, sandy clay loam, or their gravelly analogs

Bt2 horizon:

Color—hue of 2.5YR to 7.5YR, value of 5 or 6, and chroma of 6 to 8

Redoximorphic features (where present)—below a depth of 30 inches

Texture—clay loam, loam, sandy clay loam, or their gravelly analogs

Lower Bt horizon (where present):

Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 to 8; or no dominant matrix color and variegated in shades of yellow, red, brown, and gray

Texture—clay loam, loam, sandy clay loam, or their gravelly analogs

BC horizon:

Color—typically, no dominant matrix color and variegated in shades of red, brown, yellow and gray; or hue of 2.5YR or 5YR, value of 4 to 6, and chroma of 6 to 8

Texture—loam, clay loam, fine sandy loam, very fine sandy loam, or their gravelly or very gravelly analogs

Nashoba Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Hillsides

Position on the landscape: Convex areas on summits and linear-convex areas on shoulders and backslopes

Parent material: Gravelly residuum weathered from sandstone

Geology: Stanley Shale

Drainage class: Well drained

Permeability: Moderately rapid

Soil depth class: Moderately deep to lithic bedrock

Shrink-swell potential: Low

Slope: 1 to 35 percent

Taxonomic classification: Loamy-skeletal, siliceous, semiactive, thermic Typic Dystrudepts

Associated Soils

The Nashoba series is commonly associated with Bismarck, Clebit, Littlefir, Mazarn, and Sherless soils.

Typical Pedon

Nashoba cobbly fine sandy loam (fig. 23) in a forested area of Sherless-Littlefir-Nashoba complex, 8 to 15 percent slopes; SE¹/₄SW¹/₄NW¹/₄ sec. 35, T. 5 S., R. 25 W.; Pike County, Arkansas; Lodi USGS topographic quadrangle; lat. 34 degrees 15 minutes 52.43 seconds N. and long. 93 degrees 39 minutes 15.09 seconds W.

A—0 to 4 inches; brown (10YR 4/3) cobbly fine sandy loam; weak fine granular structure; friable; 20 percent angular very strongly cemented fragments of sandstone; strongly acid; clear smooth boundary.

Bw1—4 to 12 inches; yellowish brown (10YR 5/4) very gravelly fine sandy loam; weak fine subangular blocky structure; friable; 45 percent angular very strongly cemented fragments of sandstone; strongly acid; clear wavy boundary.

Bw2—12 to 28 inches; yellowish brown (10YR 5/6) very gravelly fine sandy loam; weak medium subangular blocky structure; friable; 50 percent angular very strongly cemented fragments of sandstone; very strongly acid; clear irregular boundary.

Cr/Bw3—28 to 53 inches; 90 percent fine-grained, soft, acid sandstone interbedded with thin layers of shale and siltstone; about 10 percent yellowish brown (10YR 5/6) fine sandy loam in the fractures between the layers of bedrock; weak medium granular structure; very friable; very strongly acid; abrupt irregular boundary.

R—53 to 60 inches; hard sandstone bedrock that is tilted and fractured.

Range in Characteristics

The thickness of the solum and depth to bedrock range from 20 to 40 inches. They are extremely variable within short distances due to the irregular boundary between the Bw horizon and the underlying tilted bedrock.

A horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 2 or 3

Texture—gravelly fine sandy loam, cobbly fine sandy loam, or stony fine sandy loam

Rock fragments—15 to 35 percent sandstone fragments up to 24 inches in diameter

Reaction—strongly acid or very strongly acid

Bw horizon:

Color—hue of 7.5YR, value of 4 to 6, and chroma of 4; hue of 7.5YR, value of 5, and chroma of 6 to 8; or hue of 10YR, value of 5 or 6, and chroma of 4 to 8

Texture—very gravelly loam, very gravelly fine sandy loam, very cobbly loam, or very cobbly fine sandy loam

Rock fragments—35 to 60 percent sandstone fragments up to 10 inches in diameter

Reaction—strongly acid or very strongly acid

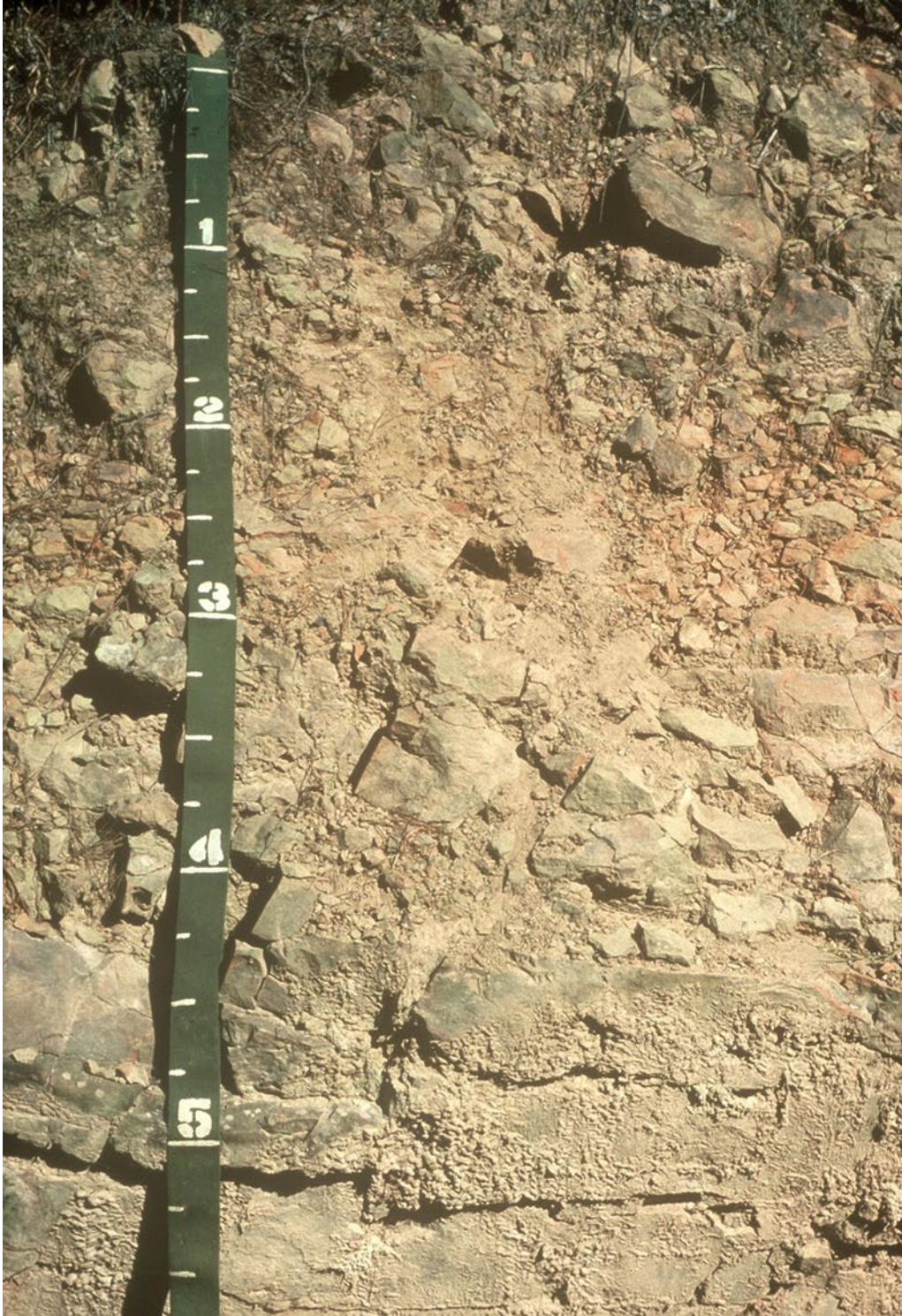


Figure 23.—Typical profile of a Nashoba soil.

B part of the Cr/B horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 3 to 6

Texture—sandy loam or fine sandy loam

Reaction—strongly acid or very strongly acid

Cr part of the Cr/B horizon:

The Cr part of the horizon consists of gray, fractured, tilted, soft, acid sandstone. In some pedons, it has thin layers of interbedded shale and/or siltstone.

R layer:

This layer consists of hard sandstone that is fractured and tilted. In some pedons, it contains seams of interbedded shale and/or siltstone.

Nathan Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Interfluves

Position on the landscape: Linear-convex areas on interfluves and crests

Parent material: Loamy marine deposits

Geology: Trinity Group

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 3 to 8 percent

Taxonomic classification: Fine-silty, siliceous, subactive, thermic Typic Hapludults

Associated Soils

The Nathan series is commonly associated with Antoine, Kizzia, Peanutrock, Pikecity, and Tiak soils.

Typical Pedon

Nathan fine sandy loam, 3 to 8 percent slopes; SE¹/₄SW¹/₄NE¹/₄ sec. 10, T. 8 S., R. 26 W.; lat. 34 degrees 4 minutes 24.60 seconds N. and long. 93 degrees 45 minutes 41.30 seconds W.

A—0 to 7 inches; very dark grayish brown (10YR 3/2) fine sandy loam; moderate medium granular structure; friable; strongly acid; clear wavy boundary.

E—7 to 14 inches; light yellowish brown (10YR 6/4) silt loam; moderate medium granular structure; friable; 10 percent, by volume, krotovinas; moderately acid; clear wavy boundary.

BE—14 to 19 inches; brownish yellow (10YR 6/6) silt loam; 1 percent medium distinct very pale brown (10YR 7/3) and 1 percent medium prominent yellowish red (5YR 5/8) mottles; moderate medium and weak fine subangular blocky structure; friable; 10 percent, by volume, krotovinas; moderately acid; clear wavy boundary.

Bt1—19 to 26 inches; strong brown (7.5YR 5/8) silty clay loam; 1 percent medium distinct yellow (10YR 7/6) mottles; moderate coarse subangular blocky structure; firm; 10 percent, by volume, krotovinas; 20 percent distinct clay films on bottom faces of peds; strongly acid; gradual wavy boundary.

Bt2—26 to 35 inches; strong brown (7.5YR 5/8) silty clay loam; 1 percent medium distinct dark red (2.5YR 3/6) mottles; moderate medium subangular blocky structure; firm; 30 percent distinct clay films on bottom faces of peds; 5 percent rounded 0.2- to 3.0-inch fragments of chert; very strongly acid; gradual wavy boundary.

Bt3—35 to 50 inches; strong brown (7.5YR 5/6) silt loam; 1 percent medium prominent red (2.5YR 4/8), 1 percent coarse distinct yellow (10YR 7/6), and 1 percent medium prominent light gray (10YR 7/1) mottles; moderate coarse and medium subangular blocky structure; friable; 15 percent distinct clay films on bottom faces of peds; 5 percent angular weakly cemented 0.1- to 3.0-inch fragments of sandstone and 5 percent very angular weakly acid 0.1- to 5.9-inch fragments of shale; very strongly acid; gradual irregular boundary.

C—50 to 80 inches; yellow (10YR 7/6) loam; 10 percent coarse distinct light gray (10YR 7/1), 10 percent coarse prominent yellowish red (5YR 4/6), and 10 percent coarse prominent red (2.5YR 4/8) mottles; moderate coarse subangular blocky structure; very friable; very strongly acid.

Range in Characteristics

The thickness of the solum ranges from 60 to more than 100 inches.

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 or 3

Texture—silt loam

Reaction—moderately acid or slightly acid

E horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 2 or 4

Texture—silt loam

Reaction—moderately acid or slightly acid

BE horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 4 to 6

Texture—silt loam

Reaction—strongly acid to slightly acid

Upper part of the Bt horizon:

Color—hue of 5YR or 7.5YR, value of 6 to 8, and chroma of 6

Redoximorphic features (where present)—few to many mottles in shades of red and brown

Texture—silt loam or silty clay loam

Reaction—very strongly acid to moderately acid

Lower part of the Bt horizon:

Color—hue of 5YR or 7.5YR, value of 5 or 6, and chroma of 6 to 8

Redoximorphic features—few or common below a depth of 30 inches; few or no iron-manganese nodules

Texture—silt loam, loam, or fine sandy loam

Rock fragments—0 to 10 percent chert, quartz, or ironstone gravel

Reaction—very strongly acid to moderately acid

C horizon:

Color—hue of 10YR, value of 7, and chroma of 6

Redoximorphic features—few or common in shades of red, brown, or gray

Texture—loam or silt loam

Reaction—very strongly acid

Neff Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on treads of flood-plain steps

Parent material: Loamy alluvium

Geology: Stanley Shale

Drainage class: Moderately well drained

Permeability: Moderately slow

Soil depth class: Very deep

Shrink-swell potential: Moderate

Slope: 0 to 2 percent

Taxonomic classification: Fine-silty, siliceous, active, thermic Aquultic Hapludalfs

Associated Soils

The Neff series is commonly associated with Ceda, Cupco, Dela, Kenn, Speer, and Woodall soils.

Typical Pedon

Neff loam, 0 to 2 percent slopes, occasionally flooded; in a pasture; NE¹/₄NE¹/₄SW¹/₄ sec. 1, T. 5 S., R. 24 W.; Pike County, Arkansas; Glenwood USGS topographic quadrangle; lat. 34 degrees 20 minutes 1.80 seconds N. and long. 93 degrees 31minutes 26.43 seconds W.

- A—0 to 3 inches; dark grayish brown (10YR 4/2) loam; weak fine granular structure; friable; moderately acid; clear smooth boundary.
- BA—3 to 14 inches; yellowish brown (10YR 5/6) silt loam; weak fine subangular blocky structure; friable; 1 percent fine iron-manganese concretions; moderately acid; clear smooth boundary.
- Bt1—14 to 26 inches; brownish yellow (10YR 6/6) silt loam; weak medium subangular blocky structure; friable; 10 percent patchy distinct clay films on bottom faces of peds; 10 percent medium distinct iron depletions; 1 percent fine iron-manganese concretions; strongly acid; gradual smooth boundary.
- Bt2—26 to 48 inches; light brownish gray (10YR 6/2) and strong brown (7.5YR 5/8) silty clay loam; moderate medium subangular blocky structure; friable; 30 percent discontinuous faint clay films on bottom faces of peds; 1 percent fine iron-manganese concretions; strongly acid; gradual smooth boundary.
- BC—48 to 80 inches; strong brown (7.5YR 5/8) and gray (10YR 6/1) loam; weak fine subangular blocky structure; friable; 1 percent fine iron-manganese concretions; very strongly acid.

Range in Characteristics

The solum is more than 60 inches thick.

A horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 2 to 4

Texture—loam

Reaction—moderately acid to very strongly acid, except where lime has been applied

BA horizon:

Color—hue of 10YR, value of 4 to 6, and chroma of 2 to 4

Redoximorphic features—iron depletions and accumulations in shades of gray or brown

Texture—loam or silt loam

Reaction—moderately acid to very strongly acid

Bt horizon:

Color—hue of 10YR, value of 4 to 8, and chroma of 2 to 6

Redoximorphic features—iron accumulations and depletions in shades of gray and brown

Texture—silt loam or silty clay loam

Reaction—slightly acid to very strongly acid

BC horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 3 or 4

Redoximorphic features—iron accumulations and depletions in shades of gray, brown, or yellow

Texture—silt loam or silty clay loam

Reaction—slightly acid to very strongly acid

Rock fragments—0 to 15 percent sandstone fragments less than 3 inches in diameter

Ochlockonee Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on treads of flood-plain steps

Parent material: Coarse-loamy alluvium

Drainage class: Well drained

Permeability: Moderately rapid

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 0 to 2 percent

Taxonomic classification: Coarse-loamy, siliceous, active, acid, thermic Typic Udifluvents

Associated Soils

The Ochlockonee series is commonly associated with Guyton, Ouachita, Pikecreek, and Vaughn soils.

Typical Pedon

Ochlockonee fine sandy loam, 0 to 2 percent slopes, rarely flooded; in a forested pasture; NW¹/₄SW¹/₄SE¹/₄ sec. 27, T. 8 S., R. 25 W.; Pike County, Arkansas; Murfreesboro USGS topographic quadrangle; lat. 34 degrees 1 minute 14.09 seconds N. and long. 93 degrees 39 minutes 19.77 seconds W.

- A—0 to 4 inches; brown (10YR 4/3) fine sandy loam with strata of finer material; moderate medium granular structure; friable; strongly acid; clear smooth boundary.
- C1—4 to 39 inches; yellowish brown (10YR 5/4) stratified sandy loam; massive; friable; strongly acid; clear smooth boundary.
- C2—39 to 55 inches; yellowish brown (10YR 5/4) stratified fine sandy loam; massive; friable; very strongly acid; clear smooth boundary.
- C3—55 to 80 inches; brown (10YR 5/3) stratified loamy sand; massive; friable; very strongly acid.

Range in Characteristics

Reaction ranges from very strongly acid to slightly acid in the A or Ap horizon and is very strongly acid or strongly acid below the A or Ap horizon. Buried soil horizons are present below a depth of 25 inches in most pedons and have the same ranges in color and texture as the A horizon. Some pedons have gravelly strata below a depth of 40 inches.

A or Ap horizon:

Color—hue of 7.5YR to 2.5Y, value of 3 to 6, and chroma of 2 to 4

Texture—fine sandy loam with strata of finer material

C horizon:

Color—hue of 5YR to 2.5Y, value of 4 to 6, and chroma of 3 to 8

Texture—sandy loam, fine sandy loam, silt loam, loam, loamy sand, or loamy fine sand. Thin strata of finer or coarser materials are in most pedons.

Mottles (where present)—brown, yellow, and gray; below a depth of 20 inches

Other features—few or common mica flakes in some pedons

Ouachita Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on treads of flood-plain steps

Soil Survey of Pike County, Arkansas

Parent material: Fine-silty alluvium

Drainage class: Well drained

Permeability: Moderately slow

Soil depth class: Very deep

Shrink-swell potential: Moderate

Slope: 0 to 3 percent

Taxonomic classification: Fine-silty, siliceous, active, thermic Fluventic Dystrudepts

Associated Soils

The Ouachita series is commonly associated with Gurdon, Guyton, Ochlockonee, Pikecreek, and Vaughn soils.

Typical Pedon

Ouachita silt loam, 0 to 2 percent slopes, occasionally flooded; in a pasture; SW¹/₄ SE¹/₄NW¹/₄ sec. 30, T. 8 S., R. 25 W.; Pike County, Arkansas; Murfreesboro USGS topographic quadrangle; lat. 34 degrees 1 minute 42.28 seconds N. and long. 93 degrees 42 minutes 57.87 seconds W.

A—0 to 9 inches; dark grayish brown (10YR 4/2) silt loam; weak medium granular structure; friable; strongly acid; clear smooth boundary.

Bw1—9 to 38 inches; dark yellowish brown (10YR 4/4) silty clay loam; weak medium subangular blocky structure; friable; very strongly acid; clear smooth boundary.

Bw2—38 to 52 inches; yellowish brown (10YR 5/8) silty clay loam; moderate medium subangular blocky structure; friable; very strongly acid; clear smooth boundary.

Bw3—52 to 77 inches; strong brown (7.5YR 5/6) loam; moderate medium subangular blocky structure; friable; 30 percent medium distinct light brownish gray (10YR 6/2) iron depletions; very strongly acid; clear wavy boundary.

C—77 to 80 inches; dark yellowish brown (10YR 4/4) fine sandy loam; weak medium subangular blocky structure; friable; 30 percent fine distinct pale brown (10YR 6/3) iron depletions; very strongly acid.

Range in Characteristics

The thickness of the solum ranges from 40 to more than 80 inches.

A horizon:

Color—hue of 10YR, value of 4, and chroma of 2 to 4

Texture—silt loam or fine sandy loam

Reaction—slightly acid to very strongly acid

AB or BA horizon (where present):

Color—hue of 10YR, value of 4 or 5, and chroma of 4

Texture—silt loam

Reaction—strongly acid or very strongly acid

Bw horizon:

Color—hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 2 to 8

Redoximorphic features (where present)—few or common in shades of brown.

In some pedons, the horizon has iron depletions with chroma of 3 or less at a depth of more than 24 inches.

Texture—silt loam, fine sandy loam, loam, or silty clay loam

Reaction—strongly acid or very strongly acid

C horizon:

Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 3 or 4

Redoximorphic features (where present)—few or common in shades of gray

Texture—fine sandy loam, loamy fine sand, or loamy sand

Reaction—strongly acid or very strongly acid

Ozan Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on treads of flood-plain steps

Parent material: Coarse-loamy alluvium

Geology: Trinity Group

Drainage class: Poorly drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 0 to 2 percent

Taxonomic classification: Coarse-loamy, siliceous, subactive, thermic Typic Glossaqualfs

Associated Soils

The Ozan series is commonly associated with Guyton, Sardis, and Toine soils.

Typical Pedon

Ozan fine sandy loam, 0 to 2 percent slopes, rarely flooded; in a forested area; NW¹/₄ SE¹/₄SW¹/₄ sec. 21, T. 8 S., R. 25 W.; Pike County, Arkansas; Murfreesboro USGS topographic quadrangle; lat. 34 degrees 2 minutes 7.00 seconds N. and long. 93 degrees 40 minutes 34.50 seconds W.

A—0 to 1 inch; yellowish brown (10YR 5/3) fine sandy loam; weak fine granular structure; very friable; strongly acid; clear smooth boundary.

Eg—1 to 7 inches; light brownish gray (10YR 6/2) fine sandy loam; weak medium granular structure; friable; 1 percent fine distinct yellowish brown (10YR 5/6) masses of oxidized iron; very strongly acid; clear smooth boundary.

Btg1—7 to 15 inches; grayish brown (10YR 5/2) fine sandy loam; weak fine subangular blocky structure; friable; 1 percent patchy faint yellowish brown (10YR 5/4) clay films on surfaces along root channels; 10 percent medium distinct yellowish brown (10YR 5/8) masses of oxidized iron; very strongly acid; clear smooth boundary.

Btg2—15 to 24 inches; light brownish gray (10YR 6/2) fine sandy loam; weak medium subangular blocky structure; friable; 1 percent patchy faint yellowish brown (10YR 5/4) clay films on surfaces along root channels; 10 percent medium distinct yellowish brown (10YR 5/6) masses of oxidized iron; very strongly acid; clear smooth boundary.

BCg—24 to 80 inches; light gray (10YR 7/1) loam; moderate fine subangular blocky structure; friable; 15 percent coarse distinct yellowish brown (10YR 5/6) masses of oxidized iron; very strongly acid.

Range in Characteristics

The thickness of the solum ranges from 60 to more than 80 inches.

A horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 1 to 3

Texture—fine sandy loam

Redoximorphic features (where present)—few in shades of brown

Reaction—slightly acid to strongly acid

Eg horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 1 or 2

Redoximorphic features (where present)—few or common in shades of gray, brown, and yellow

Soil Survey of Pike County, Arkansas

Texture—very fine sandy loam or fine sandy loam

Reaction—strongly acid or very strongly acid

Upper part of the Btg horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 1 or 2

Redoximorphic features (where present)—few or common in shades of gray, brown, and yellow

Texture—very fine sandy loam or fine sandy loam

Reaction—strongly acid or very strongly acid

Lower part of the Btg horizon:

Color—hue of 7.5YR or 10YR, value of 5 to 7, and chroma of 1 or 2; or variegated in shades of brown and gray

Redoximorphic features—common or few in shades of brown; many, common, few, or no iron-manganese concretions

Texture—very fine sandy loam, fine sandy loam, or loam

Reaction—strongly acid or very strongly acid

BCg horizon:

Color—hue of 10YR, value of 6 or 7, and chroma of 1 or 2

Redoximorphic features—common or few in shades of brown; common, few, or no iron-manganese concretions

Texture—loam, clay loam, or clay

Reaction—very strongly acid to moderately acid

Peanutrock Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Interfluves

Position on the landscape: Linear-convex areas on crests, shoulders, and backslopes

Parent material: Gravelly marine deposits

Geology: Tokio Formation

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 3 to 35 percent

Taxonomic classification: Loamy-skeletal, siliceous, semiactive, thermic Typic Hapludults

Associated Soils

The Peanutrock series is commonly associated with Nathan, Pikecity, and Tiak soils.

Typical Pedon

Peanutrock very gravelly fine sandy loam, 8 to 15 percent slopes (fig. 24); in a forested area; SE¹/₄SW¹/₄SW¹/₄ sec. 29, T. 8 S., R. 24 W.; Pike County, Arkansas; Delight USGS topographic quadrangle; lat. 34 degrees 1 minute 7.23 seconds N. and long. 93 degrees 35 minutes 36.09 seconds W.

A—0 to 4 inches; very dark grayish brown (10YR 3/2) very gravelly fine sandy loam; weak medium granular structure; very friable; common medium roots throughout; 45 percent subrounded 0.1- to 3.0-inch fragments of sandstone; moderately acid; clear wavy boundary.

E—4 to 10 inches; light yellowish brown (10YR 6/4) very gravelly fine sandy loam; weak fine subangular blocky structure; very friable; few fine and many very fine roots throughout; 10 percent subrounded 3.0- to 7.9-inch fragments of sandstone



Figure 24.—Typical profile of a Peanutrock soil.

and 35 percent subrounded 0.1- to 3.0-inch fragments of sandstone; strongly acid; gradual wavy boundary.

Bt—10 to 33 inches; strong brown (7.5YR 4/6) very gravelly loam; moderate fine and medium subangular blocky structure; friable; few medium roots throughout; 25 percent patchy faint strong brown (7.5YR 5/6) clay films on bottom faces of peds; 15 percent subrounded 3.0- to 7.9-inch fragments of sandstone and 40 percent subrounded 0.1- to 3.0-inch fragments of sandstone; strongly acid; gradual wavy boundary.

BC—33 to 80 inches; reddish yellow (7.5YR 6/6) extremely gravelly loamy sand; massive; friable; 20 percent subrounded 3.0- to 7.9-inch fragments of sandstone and 45 percent subrounded 0.1- to 3.0-inch fragments of sandstone; very strongly acid.

Range in Characteristics

The solum is more than 80 inches thick. Reaction ranges from slightly acid to strongly acid in the A horizon, from slightly acid to very strongly acid in the E and BE horizons, from moderately acid to very strongly acid in the Bt horizons, and from strongly acid to extremely acid in the BC and C horizons. The content of coarse fragments ranges from 15 to 60 percent, by volume, in the A, E, and BE horizons, from 35 to 60 percent in the upper part of the Bt horizon, from 35 to 80 percent in the lower part of the Bt horizon, and from 60 to 80 percent in the BC and C horizons. In some pedons, the lower part of the Bt horizon and the BC and C horizons consist of pebbles and cobbles of sandstone and/or chert and novaculite. The pebbles and cobbles are weakly cemented to strongly cemented by iron, gypsum, calcite, dried clay binder, or a tuffaceous material. Typically, the cementation is yellowish in the tuffaceous material and red or brown in the other materials. This cementation can occur in layers of varying thicknesses. In some pedons, there is horizon stratification with strongly contrasting particle sizes and fragment sizes.

Soil Survey of Pike County, Arkansas

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4

Texture—very gravelly fine sandy loam

E horizon:

Color—hue of 10YR, value of 4 to 6, and chroma of 3 or 4

Texture—gravelly fine sandy loam, gravelly sandy loam, gravelly loam, gravelly loamy sand, gravelly silt loam (rarely), or their very gravelly analogs

BE horizon (where present):

Color—hue of 7.5YR or 10YR, value of 5, and chroma of 6 to 8

Texture—gravelly fine sandy loam, gravelly sandy loam, gravelly loam, gravelly loamy sand, gravelly silt loam (rarely), or their very gravelly analogs

Bt horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 6 to 8; hue of 2.5YR, value of 4 or 5, and chroma of 6 to 8; or, in the lower part of the horizon in some pedons, no dominant matrix color and variegated in shades of brown, red, and gray

Texture—very gravelly loam, very gravelly clay loam, very gravelly sandy clay loam, very gravelly sandy loam, or very gravelly silt loam or their extremely gravelly analogs

BC horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 6 to 8; or variegated in shades of brown, red, and gray

Texture—very gravelly loam, very gravelly sandy clay loam, very gravelly sandy loam, very gravelly silt loam (rarely), or their extremely gravelly analogs

C horizon (where present):

Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 6 to 8; or variegated in shades of brown, red, and gray

Texture—extremely gravelly fine sandy loam, extremely gravelly loam, extremely gravelly sandy loam, extremely gravelly sandy clay loam, or their very cobbly or extremely cobbly analogs

Pikecity Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Interfluves

Position on the landscape: Linear-convex areas on interfluves

Parent material: Loamy marine deposits

Geology: Trinity Group

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Moderate

Slope: 1 to 8 percent

Taxonomic classification: Fine-loamy, siliceous, semiactive, thermic Typic Hapludults

Associated Soils

The Pikecity series is commonly associated with Nathan, Peanutrock, and Tiak soils.

Typical Pedon

Pikecity silt loam, 1 to 8 percent slopes; in a forested area; NE¹/₄SW¹/₄NW¹/₄ sec. 14, T. 7 S., R. 26 W.; Pike County, Arkansas; Narrows Dam USGS topographic

Soil Survey of Pike County, Arkansas

quadrangle; lat. 34 degrees 8 minutes 49.00 seconds N. and long. 93 degrees 44 minutes 49.00 seconds W.

- A—0 to 3 inches; dark brown (10YR 3/3) silt loam; weak fine granular structure; friable; 10 percent rounded very strongly cemented 0.1- to 3.0-inch fragments of sandstone; strongly acid; abrupt smooth boundary.
- BA—3 to 6 inches; strong brown (7.5YR 5/6) silt loam; weak fine subangular blocky structure; friable; 10 percent rounded very strongly cemented 0.1- to 3.0-inch fragments of sandstone; very strongly acid; clear smooth boundary.
- Bt1—6 to 22 inches; red (2.5YR 4/6) clay loam; moderate medium subangular blocky structure; firm; 25 percent discontinuous faint red (2.5YR 4/6) clay films on faces of peds; 5 percent rounded very strongly cemented 0.1- to 3.0-inch fragments of sandstone; extremely acid; clear wavy boundary.
- Bt2—22 to 31 inches; red (2.5YR 4/6) gravelly clay loam; moderate medium subangular blocky structure; firm; 25 percent discontinuous faint red (2.5YR 4/6) clay films on faces of peds; 15 percent rounded very strongly cemented 0.1- to 3.0-inch fragments of sandstone; extremely acid; gradual wavy boundary.
- Bt3—31 to 48 inches; red (2.5YR 4/6) gravelly clay; moderate coarse subangular blocky structure; firm; 25 percent discontinuous faint red (2.5YR 4/6) clay films on faces of peds; 5 percent rounded very strongly cemented 3.0- to 7.9-inch fragments of sandstone and 20 percent rounded very strongly cemented 0.1- to 3.0-inch fragments of sandstone; extremely acid; clear wavy boundary.
- Bt4—48 to 80 inches; dark yellowish brown (10YR 3/6), light gray (10YR 7/1), and yellowish brown (10YR 5/8) cobbly clay loam; moderate medium subangular blocky structure; firm; 25 percent discontinuous faint red (2.5YR 4/6) clay films on faces of peds; 15 percent rounded very strongly cemented 3.0- to 9.8-inch fragments of sandstone and 35 percent rounded very strongly cemented 0.1- to 3.0-inch fragments of sandstone; extremely acid.

Range in Characteristics

The solum is more than 6 feet thick. Depth to a horizon containing more than 35 percent, by volume, gravel is 30 inches or more. Depth to a horizon containing more than 40 percent clay is also 30 inches or more. Reaction ranges from slightly acid to strongly acid in the A and BA horizons and from strongly acid to extremely acid in the Bt and BC horizons. The content of coarse fragments ranges from 0 to 35 percent, by volume, in the A, E, and BE horizons and the upper part of the Bt horizon and from 15 to 60 percent in the lower part of the Bt horizon and in the BC horizon.

A or Ap horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4; or hue of 7.5YR, value of 4, and chroma of 4
Texture—silt loam

E horizon (where present):

Color—hue of 10YR, value of 4 to 6, and chroma of 3 or 4
Texture—fine sandy loam, sandy loam, loam, silt loam, or their gravelly analogs

BA horizon:

Color—hue of 7.5YR, value of 4 to 6, and chroma of 5 or 6; or hue of 10YR, value of 4 or 5, and chroma of 4 to 8
Texture—very fine sandy loam, loam, silt loam, or their gravelly analogs

Bt1 horizon:

Color—hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 4 to 8
Texture—loam, clay loam, sandy clay loam, or their gravelly analogs

Soil Survey of Pike County, Arkansas

Bt2 horizon:

Color—hue of 7.5YR, value of 4 or 5, and chroma of 6 to 8; hue of 5YR, value of 4 or 5, and chroma of 4 to 8; hue of 2.5YR, value of 4 or 5, and chroma of 6 to 8; or hue of 10R, value of 3, and chroma of 6

Texture—sandy clay loam, clay loam, clay, or their gravelly analogs

Bt3 horizon:

Color—hue of 7.5YR, value of 4 or 5, and chroma of 6 to 8; hue of 5YR, value of 4 or 5, and chroma of 4 to 8; hue of 2.5YR, value of 4 or 5, and chroma of 6 to 8; or no dominant matrix color and variegated in shades of brown, red, and gray

Texture—loam, sandy clay loam, clay loam, clay, or their gravelly, very gravelly, or cobbly analogs

Bt4 horizon:

Color—hue of 7.5YR, value of 4 or 5, and chroma of 6 to 8; hue of 5YR, value of 4 or 5, and chroma of 4 to 8; hue of 2.5YR, value of 4 or 5, and chroma of 6 to 8; or variegated in shades of brown, red, and gray

Texture—loam, clay loam, sandy clay loam, or their gravelly, very gravelly, or cobbly analogs

BC horizon (where present):

Color—hue of 7.5YR, value of 4 or 5, and chroma of 6 to 8; hue of 5YR, value of 4 or 5, and chroma of 4 to 8; hue of 2.5YR, value of 4 or 5, and chroma of 6 to 8; or variegated in shades of brown, red, and gray

Texture—gravelly loam, gravelly clay loam, gravelly sandy clay loam, or their very gravelly, cobbly, or very cobbly analogs

Pikecreek Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on flood plains

Parent material: Gravelly alluvium derived from sandstone

Geology: Alluvium

Drainage class: Somewhat excessively drained

Permeability: Rapid

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 0 to 3 percent

Taxonomic classification: Sandy-skeletal, siliceous, thermic Typic Udifluvents

Associated Soils

The Pikecreek series is commonly associated with Gurdon, Guyton, Murfreesboro, Ochlockonee, Ouachita, and Vaughn soils.

Typical Pedon

Pikecreek very gravelly loamy sand in a forested area of Vaughn-Pikecreek complex, 0 to 3 percent slopes, frequently flooded; SW¹/₄NW¹/₄NE¹/₄ sec. 8, T. 8 S., R. 24 W.; Pike County, Arkansas; Delight USGS topographic quadrangle; lat. 34 degrees 4 minutes 25.04 seconds N. and long. 93 degrees 35 minutes 2.50 seconds W.

A—0 to 4 inches; brown (7.5YR 4/4) very gravelly loamy sand; moderate fine granular structure; friable; 10 percent well rounded 3.0- to 9.8-inch fragments of sandstone and 25 percent well rounded 0.1- to 3.0-inch fragments of sandstone; strongly acid; clear wavy boundary.

- C1—4 to 20 inches; strong brown (7.5YR 4/6) extremely gravelly loamy sand; massive; friable; few very fine roots and fine roots throughout; 15 percent subrounded 3.0- to 7.9-inch fragments of sandstone and 55 percent subrounded 0.1- to 3.0-inch fragments of sandstone; strongly acid; clear wavy boundary.
- C2—20 to 33 inches; strong brown (7.5YR 4/6) extremely gravelly loamy coarse sand; massive; friable; few very fine and fine roots throughout; 20 percent subrounded 3.0- to 9.8-inch fragments of sandstone and 50 percent subrounded 0.1- to 2.9-inch fragments of sandstone; strongly acid; clear wavy boundary.
- C3—33 to 80 inches; strong brown (7.5YR 5/6) extremely cobbly loamy coarse sand; massive; friable; 25 percent subrounded 3.0- to 9.8-inch fragments of sandstone and 45 percent subrounded 0.1- to 2.9-inch fragments of sandstone; very strongly acid.

Range in Characteristics

The thickness of the solum ranges from 40 to more than 60 inches.

A horizon:

Color—hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 2 to 4. Where moist value is 3, the horizon is less than 7 inches thick.

Texture—gravelly, very gravelly, cobbly, or very cobbly analogs of sand, loamy sand, loamy fine sand, or fine sandy loam

Rock fragments—15 to 60 percent

Reaction—strongly acid to slightly acid

C horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 2 to 6

Texture—very gravelly, extremely gravelly, very cobbly, or extremely cobbly analogs of sand, loamy sand, loamy coarse sand, or loamy fine sand

Other features—erratic, thin strata in the lower part of the horizon in many pedons.

The strata consist of coarse fragments with less than 15 percent fines.

Rock fragments—35 to 85 percent

Reaction—very strongly acid to slightly acid

Pirum Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Mountain side slopes and ridges

Position on the landscape: Convex areas on summits and linear-convex areas on shoulders and backslopes

Parent material: Loamy residuum weathered from sandstone

Geology: Jackfork Sandstone

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Moderately deep to lithic bedrock

Shrink-swell potential: Moderate

Slope: 1 to 15 percent

Taxonomic classification: Fine-loamy, siliceous, semiactive, thermic Typic Hapludults

Associated Soils

The Pirum series is commonly associated with Carnasaw, Clebit, Octavia, Sherless, and Zafra soils.

Typical Pedon

Pirum stony loam in a forested area of Carnasaw-Pirum complex, 3 to 15 percent slopes, rubbly; SE¹/₄NE¹/₄NW¹/₄ sec. 10, T. 7 S., R. 25 W.; Pike County, Arkansas; Narrows Dam USGS topographic quadrangle; lat. 34 degrees 9 minutes 39.15 seconds N. and long. 93 degrees 39 minutes 14.63 seconds W.

- A—0 to 4 inches; brown (10YR 4/3) stony loam; weak fine granular structure; friable; 5 percent subangular very strongly cemented 0.1- to 3.0-inch fragments of sandstone, 10 percent subangular very strongly cemented 9.8- to 23.6-inch fragments of sandstone, and 10 percent subangular very strongly cemented 3.0- to 9.8-inch fragments of sandstone; strongly acid; clear smooth boundary.
- E—4 to 8 inches; yellowish brown (10YR 5/4) gravelly fine sandy loam; weak fine subangular blocky structure; friable; 15 percent subangular very strongly cemented 0.1- to 3.0-inch fragments of sandstone; strongly acid; clear smooth boundary.
- Bt1—8 to 26 inches; yellowish brown (10YR 5/6) clay loam; moderate medium subangular blocky structure; firm; 30 percent discontinuous faint yellowish brown (10YR 5/4) clay films on faces of peds; 5 percent subangular very strongly cemented 0.1- to 3.0-inch fragments of sandstone; very strongly acid; gradual smooth boundary.
- Bt2—26 to 38 inches; yellowish brown (10YR 5/8) gravelly clay loam; moderate medium subangular blocky structure; firm; 20 percent patchy faint yellowish brown (10YR 5/6) clay films on top faces of peds; 10 percent subangular very strongly cemented 0.1- to 3.0-inch fragments of sandstone; very strongly acid; abrupt smooth boundary.
- R—38 to 50 inches; hard, unweathered sandstone bedrock that is tilted and interbedded with thin strata of soft sandstone and acid shale.

Range in Characteristics

The thickness of the solum and depth to bedrock range from 20 to 50 inches. They are extremely variable due to the irregular boundary between the Bt horizon and the underlying tilted bedrock.

A horizon:

Color—hue of 7.5YR, value of 4, and chroma of 2 to 4; or hue of 10YR, value of 3 or 4, and chroma of 2 to 4

Texture—stony loam or stony fine sandy loam

Rock fragments—15 to 60 percent sandstone fragments up to 24 inches in diameter

Reaction—strongly acid or very strongly acid

E horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4

Texture—loam, fine sandy loam, or their gravelly or cobbly analogs

Rock fragments—0 to 35 percent sandstone fragments up to 10 inches in diameter

Reaction—strongly acid or very strongly acid

BE horizon (where present):

Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 5 or 6

Texture—loam, fine sandy loam, or their gravelly or cobbly analogs

Rock fragments—0 to 35 percent sandstone fragments up to 10 inches in diameter

Reaction—strongly acid or very strongly acid

Bt horizon:

Color—hue of 5YR, value of 4 or 5, and chroma of 6 to 8; or hue of 7.5YR or 10YR, value of 5, and chroma of 6 to 8

Texture—sandy clay loam, loam, clay loam, or their gravelly or cobbly analogs

Rock fragments—0 to 35 percent sandstone fragments up to 10 inches in diameter

Reaction—extremely acid to strongly acid

R layer:

This layer consists of hard, massive, fractured sandstone bedrock. In some pedons, it is interbedded with shale and/or siltstone.

Sardis Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on treads of flood-plain steps

Parent material: Fine-silty alluvium

Geology: Stanley Shale

Drainage class: Somewhat poorly drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Moderate

Slope: 0 to 2 percent

Taxonomic classification: Fine-silty, siliceous, active, thermic Fluvaquentic
Dystrochrepts

Associated Soils

The Sardis series is commonly associated with Gurdon, Guyton, Ouachita, Pikecreek, and Vaughn soils.

Typical Pedon

Sardis silt loam, 0 to 2 percent slopes, occasionally flooded; SE¹/₄NE¹/₄SE¹/₄ sec. 9, T. 8 S., R. 25 W.; Pike County, Arkansas; Murfreesboro USGS topographic quadrangle; lat. 34 degrees 3 minutes 58.50 seconds N. and long. 93 degrees 39 minutes 47.00 seconds W.

A—0 to 7 inches; grayish brown (10YR 5/2) silt loam; weak medium granular structure; friable; strongly acid; clear smooth boundary.

Bw1—7 to 20 inches; brown (10YR 5/3) silt loam; weak medium subangular blocky structure; friable; 10 percent medium distinct dark brown (10YR 3/3) masses of oxidized iron; strongly acid; clear smooth boundary.

Bw2—20 to 60 inches; light yellowish brown (10YR 6/4) silty clay loam; moderate medium subangular blocky structure; firm; 25 percent medium distinct light brownish gray (10YR 6/2) iron depletions; very strongly acid; clear smooth boundary.

Bw3—60 to 73 inches; light brownish gray (10YR 6/2) silt loam; weak medium subangular blocky structure; friable; 10 percent medium prominent yellowish brown (10YR 5/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.

Cg—73 to 80 inches; light brownish gray (10YR 6/2) and yellowish brown (10YR 5/6) silty clay loam; massive; firm; 5 percent iron-manganese concretions; 3 percent subrounded fragments of sandstone; very strongly acid.

Range in Characteristics

The thickness of the solum ranges from 40 to more than 60 inches. Reaction ranges from moderately acid to very strongly acid, except in the surface layer where lime has been applied.

A horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 2 or 3

Texture—very fine sandy loam

Reaction—strongly acid or very strongly acid

Upper part of the B horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 2 to 4

Redoximorphic features—few or common in shades of gray, brown, and yellow; iron depletions with chroma of 2 or less at depths of 12 to 24 inches

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Texture—silt loam or silty clay loam

Reaction—moderately acid or strongly acid

Lower part of the B horizon:

Color—hue of 10YR, value of 4 to 6, and chroma of 2 to 6

Redoximorphic features—few or common in shades of gray, brown, and yellow

Texture—silt loam or silty clay loam

Reaction—moderately acid to very strongly acid

Cg horizon:

Color—variegated in shades of gray and yellowish brown

Redoximorphic features (where present)—few or common iron accumulations in shades of brown and yellowish brown and iron depletions in shades of gray; few or common iron-manganese concretions

Texture—silty clay loam, loam, silt loam, or sandy loam

Reaction—moderately acid to very strongly acid

Other features—0 to 5 percent gravel

Sherless Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Side slopes and ridges

Position on the landscape: Convex areas on summits and linear-convex areas on shoulders and backslopes

Parent material: Loamy residuum weathered from sandstone and shale

Geology: Stanley Shale

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Moderately deep to paralithic bedrock

Shrink-swell potential: High

Slope: 1 to 35 percent

Taxonomic classification: Fine-loamy, siliceous, semiactive, thermic Typic Hapludults

Associated Soils

The Sherless series is commonly associated with Carnasaw, Clebit, Littlefir, Mazarn, Nashoba, and Zafra soils.

Typical Pedon

Sherless cobbly fine sandy loam (fig. 25) in a forested area of Sherless-Littlefir-Nashoba complex, 15 to 35 percent slopes; NW¹/₄NW¹/₄SE¹/₄ sec. 23, T. 5 S., R. 27 W.; Pike County, Arkansas; Langley USGS topographic quadrangle; lat. 34 degrees 17 minutes 46.75 seconds N. and long. 93 degrees 51 minutes 24.87 seconds W.

A—0 to 5 inches; dark grayish brown (10YR 4/2) cobbly fine sandy loam; weak medium granular structure; friable; 15 percent subangular strongly cemented fragments of sandstone; strongly acid; clear smooth boundary.

E—5 to 8 inches; yellowish brown (10YR 5/4) fine sandy loam; moderate medium granular structure; friable; strongly acid; clear smooth boundary.

BE—8 to 17 inches; strong brown (7.5YR 5/6) fine sandy loam; weak fine subangular blocky structure; friable; strongly acid; clear smooth boundary.

Bt—17 to 27 inches; yellowish red (5YR 5/8) clay loam; moderate medium subangular blocky structure; firm; 30 percent discontinuous distinct strong brown (7.5YR 5/6) clay films on faces of peds; very strongly acid; gradual wavy boundary.

BC—27 to 39 inches; red (2.5YR 4/6), yellowish red (5YR 5/8), and brownish yellow (10YR 6/6) very gravelly sandy clay loam; moderate medium subangular blocky structure; firm; 15 percent flat very angular weakly acid fragments of shale and



Figure 25.—Typical profile of a Sherless soil.

25 percent subangular moderately cemented fragments of sandstone; very strongly acid; abrupt irregular boundary.

Cr—39 to 45 inches; fractured and tilted, soft interbedded sandstone and shale in shades of red, brown, yellow, and gray.

Range in Characteristics

The thickness of the solum ranges from 20 to 40 inches. It is extremely variable due to the irregular boundary between the BC horizon and the underlying tilted bedrock. The content of gravel ranges from 5 to 20 percent, by volume, throughout the solum. The content of cobbles ranges from 0 to 20 percent, by volume, in the A horizon and from 0 to 15 percent in the B horizon. The total volume of coarse fragments in the B horizon is less than 35 percent. In some pedons, the Bt and BC horizons are characterized by alternating layers of strongly weathered sandstone and loamy to clayey soil material. These soil layers are the result of the soft shale weathering more rapidly than the sandstone.

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4
Texture—fine sandy loam or its gravelly, cobbly, or stony analogs
Rock fragments—0 to 35 percent sandstone fragments less than 10 inches in diameter
Reaction—moderately acid or strongly acid, except where amendments have been applied

E horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4
Texture—fine sandy loam or gravelly fine sandy loam
Rock fragments—0 to 35 percent sandstone fragments less than 3 inches in diameter
Reaction—strongly acid or very strongly acid

BE horizon:

Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 5 or 6
Texture—loam, fine sandy loam, or their gravelly or cobbly analogs
Rock fragments—0 to 35 percent sandstone fragments up to 10 inches in diameter
Reaction—strongly acid or very strongly acid

Bt or Bt1 horizon:

Color—hue of 5YR, value of 4 or 5, and chroma of 6 to 8; or hue of 7.5YR or 10YR, value of 5, and chroma of 6 to 8
Texture—sandy clay loam, loam, clay loam, or their gravelly analogs
Rock fragments—0 to 35 percent sandstone fragments less than 3 inches in diameter
Reaction—strongly acid to extremely acid

Bt2 horizon (where present):

Color—hue of 5YR, value of 4 or 5, and chroma of 6 to 8; or hue of 7.5YR, value of 5, and chroma of 6 to 8
Texture—sandy clay loam, gravelly sandy clay loam, clay loam, gravelly clay loam, or channery clay loam
Rock fragments—0 to 35 percent sandstone fragments less than 3 inches in diameter or shale fragments less than 6 inches in length
Reaction—strongly acid or very strongly acid

BC horizon:

Color—hue of 5YR, value of 4 or 5, and chroma of 6 to 8; hue of 7.5YR, value of 5, and chroma of 6 to 8; hue of 2.5YR, value of 4, and chroma of 6 to 8; hue of 10YR, value of 5 or 6, and chroma of 6 to 8; or no dominant matrix hue and variegated in shades of red, brown, yellow, and gray. The colors are

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believed to be inherited from the underlying parent material and not a result of redoximorphic processes.

Texture—loam, fine sandy loam, sandy clay loam, or their gravelly, very gravelly, or cobbly analogs; or clay loam or its gravelly, very gravelly, cobbly, channery, or very channery analogs

Rock fragments—5 to 60 percent sandstone fragments less than 10 inches in diameter or shale fragments less than 6 inches in length

Reaction—strongly acid to extremely acid

Cr horizon:

This horizon consists of fractured, tilted, soft, acid sandstone or interbedded sandstone, shale, and siltstone. The horizon is in shades of red, brown, yellow, and gray. In some pedons where shale has weathered at a depth of more than 40 inches, the horizon contains seams of soil material.

Sherwood Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Hillsides or mountainsides

Position on the landscape: Linear-convex areas on backslopes

Parent material: Loamy residuum weathered from sandstone

Geology: Jackfork Sandstone

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Moderately deep to lithic bedrock

Shrink-swell potential: Low

Slope: 35 to 60 percent

Taxonomic classification: Fine-loamy, mixed, semiactive, thermic Typic Hapludults

Associated Soils

The Sherwood series is commonly associated with Carnasaw, Clebit, Littlefir, Nashoba, Sherless, and Zafra soils.

Typical Pedon

Sherwood cobbly fine sandy loam in a forested area of Carnasaw-Sherwood-Zafra complex, 35 to 60 percent slopes, extremely stony; NE¹/₄SW¹/₄SE¹/₄ sec. 13, T. 6 S., R. 25 W.; Pike County, Arkansas; Murfreesboro USGS topographic quadrangle; lat. 34 degrees 13 minutes 30.88 seconds N. and long. 93 degrees 36 minutes 29.90 seconds W.

A—0 to 5 inches; dark grayish brown (10YR 4/2) cobbly fine sandy loam; moderate medium granular structure; friable; 5 percent subangular 9.8- to 23.6-inch fragments of sandstone, 10 percent angular 0.1- to 3.0-inch fragments of sandstone, and 10 percent angular 3.0- to 9.8-inch fragments of sandstone; strongly acid; clear smooth boundary.

E—5 to 13 inches; yellowish brown (10YR 5/4) fine sandy loam; weak fine and medium subangular blocky structure; friable; 10 percent angular 0.1- to 3.0-inch fragments of sandstone; strongly acid; clear smooth boundary.

Bt1—13 to 34 inches; yellowish red (5YR 5/8) sandy clay loam; moderate medium subangular blocky structure; friable; 20 percent patchy faint strong brown (7.5YR 5/6) clay films on bottom faces of peds; 10 percent angular 0.1- to 3.0-inch fragments of sandstone; strongly acid; clear wavy boundary.

Bt2—34 to 42 inches; yellowish red (5YR 5/6) sandy clay loam; moderate medium subangular blocky structure; firm; 30 percent discontinuous faint strong brown

- (7.5YR 5/6) clay films on faces of peds; 10 percent angular 0.1- to 3.0-inch fragments of sandstone; very strongly acid; clear wavy boundary.
- BC—42 to 45 inches; yellowish red (5YR 5/6) gravelly loam; weak medium subangular blocky structure; friable; 20 percent angular 0.1- to 3.0-inch fragments of sandstone; very strongly acid; abrupt irregular boundary.
- Cr—45 to 52 inches; soft sandstone and shale that are tilted more than 20 degrees from horizontal; abrupt irregular boundary.
- R—52 to 82 inches; hard sandstone interbedded with shale.

Range in Characteristics

The thickness of the solum ranges from 30 to 60 inches. It is extremely variable within short distances due to the irregular boundary between the soil and the weathered bedrock.

A horizon:

- Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4; or hue of 7.5YR, value of 3 or 4, and chroma of 2 or 3
- Texture—cobbly fine sandy loam, stony fine sandy loam, or very stony fine sandy loam
- Rock fragments—15 to 60 percent sandstone and/or quartzite fragments less than 24 inches in diameter
- Reaction—moderately acid or strongly acid, except where amendments have been applied

E horizon:

- Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4
- Texture—fine sandy loam or its gravelly or cobbly analogs
- Rock fragments—0 to 35 percent sandstone and/or quartzite fragments less than 10 inches in diameter
- Reaction—strongly acid or very strongly acid

BE horizon (where present):

- Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 5 or 6
- Texture—loam, fine sandy loam, or their gravelly or cobbly analogs
- Rock fragments—0 to 35 percent sandstone fragments up to 10 inches in diameter
- Reaction—strongly acid or very strongly acid

Bt horizon:

- Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 to 8
- Texture—sandy clay loam, loam, clay loam, or their gravelly or cobbly analogs
- Rock fragments—0 to 35 percent sandstone and/or quartzite fragments less than 10 inches in diameter
- Reaction—strongly acid or very strongly acid

BC horizon:

- Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 to 8
- Texture—sandy clay loam, loam, clay loam, or their gravelly or very gravelly analogs
- Rock fragments—5 to 60 percent sandstone fragments less than 3 inches in diameter or shale fragments less than 6 inches in length
- Reaction—strongly acid to extremely acid

Cr horizon:

- This horizon consists of soft sandstone and shale that are typically interbedded and tilted more than 20 degrees from horizontal.

R layer:

This layer consists primarily of hard, quartzitic sandstone that is typically interbedded with layers and/or pockets of quartzite. In some pedons, the R layer contains interbedded layers of soft sandstone and/or shale and siltstone. The bedrock is fractured and tilted. In some pedons where the shale has weathered at a depth of more than 60 inches, the R layer contains seams of soil material.

Smithton Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Stream terraces

Position on the landscape: Linear-concave areas on treads

Parent material: Coarse-loamy marine deposits

Geology: Quaternary Terrace

Drainage class: Poorly drained

Permeability: Moderately slow

Soil depth class: Very deep

Shrink-swell potential: Moderate

Slope: 0 to 2 percent

Taxonomic classification: Coarse-loamy, siliceous, semiactive, thermic Typic Paleaquults

Associated Soils

The Smithton series is commonly associated with McCaskill, Ouachita, Sardis, and Stelltown soils.

Typical Pedon

Smithton fine sandy loam, 0 to 2 percent slopes; in a forested area; NE¹/₄SW¹/₄SW¹/₄ sec. 2, T. 9 S., R. 23 W.; Pike County, Arkansas; Piney Grove USGS topographic quadrangle; lat. 33 degrees 59 minutes 14.09 seconds N. and long. 93 degrees 26 minutes 2.88 seconds W.

- A—0 to 3 inches; very dark grayish brown (10YR 3/2) fine sandy loam; weak fine granular structure; friable; 10 percent medium and coarse faint dark grayish brown (10YR 4/2) iron depletions; 2 percent medium prominent yellowish red (5YR 5/8) soft masses of iron accumulations; strongly acid; abrupt smooth boundary.
- Eg—3 to 9 inches; light brownish gray (10YR 6/2) fine sandy loam; weak fine granular structure; friable; 10 percent medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; 2 percent medium prominent yellowish red (5YR 5/8) masses of oxidized iron; very strongly acid; clear wavy boundary.
- Btg1—9 to 23 inches; gray (10YR 6/1) and yellowish brown (10YR 5/6) very fine sandy loam; weak medium subangular blocky structure; friable; 5 percent patchy faint clay films on surfaces along root channels; 10 percent medium prominent red (2.5YR 5/6) masses of oxidized iron; very strongly acid; gradual smooth boundary.
- Btg2—23 to 41 inches; gray (10YR 6/1) fine sandy loam; weak medium subangular blocky structure; friable; 5 percent patchy faint clay films on surfaces along root channels; 2 percent fine prominent yellowish red (5YR 5/8) masses of oxidized iron; very strongly acid; gradual smooth boundary.
- Btg3—41 to 51 inches; gray (10YR 6/1) clay loam; moderate medium subangular blocky structure; firm; 5 percent discontinuous faint clay films on bottom faces of peds; 2 percent medium prominent red (2.5YR 5/6) iron-manganese masses; very strongly acid; gradual smooth boundary.
- Btg4—51 to 80 inches; yellowish brown (10YR 5/6) and gray (10YR 6/1) clay loam; moderate medium subangular blocky structure; firm; 5 percent discontinuous faint

clay films on bottom faces of peds; 2 percent fine prominent red (2.5YR 5/6) iron-manganese masses; very strongly acid.

Range in Characteristics

The solum is more than 80 inches thick. The content of rounded or subrounded quartz gravel ranges from 0 to 5 percent, by volume, throughout.

A horizon:

Color—hue of 10YR, value of 3 to 5, and chroma of 2 or less

Texture—fine sandy loam

Redoximorphic features—few or common in shades of gray, red, and brown

Reaction—very strongly acid to moderately acid

Eg horizon:

Color—hue of 10YR, value of 6, and chroma of 2 or 3

Texture—fine sandy loam

Redoximorphic features—few or common in shades of gray, red, yellow, and brown

Reaction—strongly acid or very strongly acid

Btg horizon

Color—hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 to 3; or variegated in shades of gray, brown, red, or yellow

Redoximorphic features—few to many, typically in shades of brown, gray, red, or yellow

Texture—loam, very fine sandy loam, fine sandy loam, sandy loam, silt loam, or, below a depth of 40 inches, sandy clay loam, clay loam, or silty clay loam

Reaction—very strongly acid to neutral

Speer Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on treads of flood-plain steps

Parent material: Loamy alluvium derived from sandstone and shale

Geology: Stanley Shale

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 0 to 3 percent

Taxonomic classification: Fine-loamy, siliceous, active, thermic Ultic Hapludalfs

Associated Soils

The Speer series is commonly associated with Avilla, Cupco, Dela, Neff, and Woodall soils.

Typical Pedon

Speer fine sandy loam, 0 to 2 percent slopes, rarely flooded (fig. 26); in a pasture; NE¹/₄NW¹/₄NE¹/₄ sec. 26, T. 5 S., R. 27 W.; Pike County, Arkansas; Langley USGS topographic quadrangle; lat. 34 degrees 17 minutes 20.92 seconds N. and long. 93 degrees 51 minutes 19.16 seconds W.

A—0 to 3 inches; dark yellowish brown (10YR 4/4) fine sandy loam; weak fine granular structure; friable; strongly acid; clear smooth boundary.



Figure 26.—Typical profile of a Speer soil.

BA—3 to 13 inches; yellowish brown (10YR 5/6) fine sandy loam; weak fine subangular blocky structure; friable; strongly acid; clear smooth boundary.

Bt1—13 to 34 inches; dark yellowish brown (10YR 4/6) loam; weak medium subangular blocky structure; friable; 15 percent patchy faint yellowish brown

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(10YR 5/6) clay films on bottom faces of peds; strongly acid; clear smooth boundary.

Bt2—34 to 72 inches; brown (7.5YR 4/4) loam; weak medium subangular blocky structure; friable; 15 percent patchy faint dark yellowish brown (10YR 4/4) clay films on bottom faces of peds; very strongly acid.

Range in Characteristics

The thickness of the solum ranges from 40 to more than 60 inches.

A horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 3 or 4; or hue of 7.5YR, value of 4, and chroma of 4

Texture—fine sandy loam

Reaction—slightly acid to strongly acid, except where amendments have been applied

BA horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 3 to 6; or hue of 7.5YR, value of 4, and chroma of 4

Texture—fine sandy loam or loam

Reaction—moderately acid or strongly acid

Bt horizon:

Color—hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 8

Texture—sandy clay loam, loam, or (rarely) clay loam

Reaction—moderately acid to very strongly acid

BC horizon (where present):

Color—hue of 10YR, value of 4 to 6, and chroma of 4 to 6; or hue of 7.5YR, value of 5, and chroma of 4 to 6

Texture—loam or fine sandy loam

Redoximorphic features (where present)—accumulations and depletions in shades of brown, yellow, and gray

Rock fragments—0 to 15 percent sandstone fragments less than 3 inches in diameter

Reaction—moderately acid to very strongly acid

Stelltown Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Interfluves

Position on the landscape: Linear-convex areas on interfluves, crests, and backslopes

Parent material: Coarse-loamy marine deposits

Geology: Tokio Formation

Drainage class: Moderately well drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 1 to 12 percent

Taxonomic classification: Coarse-loamy, siliceous, semiactive, thermic Aquic

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Associated Soils

The Stelltown series is commonly associated with McCaskill, Peanutrock, Pikecity, and Smithton soils.

Typical Pedon

Stelltown sandy loam, 1 to 6 percent slopes; field soil sample S03AR109–8; SW¹/₄ NE¹/₄NW¹/₄ sec. 16, T. 8 S., R. 23 W.; lat. 34 degrees 3 minutes 12.40 seconds N. and long. 93 degrees 28 minutes 9.70 seconds W.

A—0 to 6 inches; dark gray (10YR 4/1) sandy loam; weak medium subangular blocky structure; friable; 1 percent fine prominent masses of oxidized iron; strongly acid; clear wavy boundary.

E—6 to 11 inches; dark gray (2.5Y 4/1) sandy loam; weak medium subangular blocky structure; friable; 1 percent medium faint light brownish gray (2.5Y 6/2) iron depletions; 1 percent fine prominent strong brown (7.5YR 5/6) masses of oxidized iron; 1 percent medium faint olive yellow (2.5Y 6/6) masses of oxidized iron; strongly acid; clear wavy boundary.

Bt1—11 to 27 inches; brownish yellow (10YR 6/6) sandy loam; moderate medium subangular blocky structure; firm; 10 percent patchy distinct clay films on bottom faces of peds; 5 percent medium faint light brownish gray (10YR 6/2) iron depletions; 1 percent fine distinct yellowish brown (10YR 5/8) masses of oxidized iron; very strongly acid; clear wavy boundary.

Bt2—27 to 42 inches; yellowish brown (10YR 5/6) sandy loam; moderate medium subangular blocky structure; firm; 30 percent patchy distinct clay films on bottom faces of peds; 25 percent medium distinct gray (10YR 6/1) iron depletions; 1 percent medium prominent yellowish red (5YR 5/6) masses of oxidized iron; very strongly acid; clear irregular boundary.

Bt3—42 to 77 inches; gray (10YR 6/1), yellowish brown (10YR 5/6), and red (2.5YR 4/8) sandy clay loam; moderate medium subangular blocky structure; friable; 10 percent patchy distinct clay films on bottom faces of peds; very strongly acid.

Range in Characteristics

The solum is more than 60 inches thick. Reaction ranges from slightly acid to strongly acid, except in the surface layer where lime has been applied.

A horizon:

Color—hue of 10YR, value of 3 to 5, and chroma of 1 to 3

Texture—sandy loam

Rock fragments—0 to 10 percent, predominantly pebbles

AB or BA horizon (where present):

Color—hue of 10YR, value of 5 or 6, and chroma of 4

Texture—fine sandy loam

Rock fragments—0 to 10 percent, predominantly pebbles

E horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 to 4

Texture—loam, sandy loam, fine sandy loam, or loamy sand

Rock fragments—0 to 10 percent, predominantly pebbles

Bt1 horizon:

Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 4 to 8; or variegated in shades of brown and gray

Redoximorphic features (where present)—few to many iron depletions with chroma of 2 or less

Texture—fine sandy loam, loam, or sandy loam

Rock fragments—0 to 10 percent, predominantly pebbles

Bt2 horizon:

Color—hue of 5YR to 10YR, value of 5 or 6, and chroma of 6 to 8

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Redoximorphic features (where present)—few to many iron depletions with chroma of 2 or less; few or common iron-manganese masses
Texture—loamy sand, fine sandy loam, sandy loam, or loam
Rock fragments—0 to 10 percent, predominantly pebbles

Bt3 horizon:

Color—hue of 5YR to 10YR, value of 5 or 6, and chroma of 6 to 8; or variegated in shades of brown, red, and gray
Redoximorphic features (where present)—few to many iron depletions with chroma of 2 or less; few or common iron-manganese masses
Texture—very fine sandy loam, fine sandy loam, sandy clay loam, sandy loam, or their gravelly analogs
Rock fragments—0 to 30 percent, predominantly pebbles

Tiak Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Interfluves

Position on the landscape: Linear-convex areas on crests, interfluves, and backslopes

Parent material: Upland clayey marine deposits; clayey marine deposits

Geology: DeQueen Limestone and Trinity Group

Drainage class: Moderately well drained

Permeability: Slow

Soil depth class: Very deep

Shrink-swell potential: High

Slope: 1 to 15 percent

Taxonomic classification: Fine, mixed, active, thermic Aquic Hapludults

Associated Soils

The Tiak series is commonly associated with Nathan, Peanutrock, Pikecity, and Stelltown soils.

Typical Pedon

Tiak gravelly very fine sandy loam, 1 to 8 percent slopes; in a forested area; NW¹/₄ NE¹/₄SW¹/₄ sec. 23, T. 8 S., R. 26 W.; Pike County, Arkansas; Nathan USGS topographic quadrangle; lat. 34 degrees 2 minutes 31.96 seconds N. and long. 93 degrees 45 minutes 1.96 seconds W.

A—0 to 6 inches; yellowish brown (10YR 4/4) gravelly very fine sandy loam; weak medium granular structure; friable; common coarse roots throughout; common fine low-continuity irregular pores; 15 percent subrounded 0.1- to 3.0-inch fragments of sandstone; strongly acid; clear smooth boundary.

Bt1—6 to 19 inches; yellowish red (5YR 5/6) silty clay; moderate medium subangular blocky structure; firm, slightly sticky, slightly plastic; few medium roots throughout; common very fine moderate-continuity tubular pores; 30 percent continuous distinct clay films on faces of peds; very strongly acid; clear smooth boundary.

Bt2—19 to 27 inches; yellowish red (5YR 4/6) clay; moderate medium subangular blocky structure; firm, moderately sticky, slightly plastic; common very fine moderate-continuity tubular pores; 60 percent continuous distinct clay films on faces of peds; 20 percent medium prominent irregular yellowish brown (10YR 5/6) masses of oxidized iron throughout; 5 percent fine prominent irregular light brownish gray (10YR 6/2) iron depletions; very strongly acid; clear wavy boundary.

Bt3—27 to 40 inches; red (2.5YR 4/6) clay; strong medium and coarse subangular blocky structure; very firm, moderately sticky, slightly plastic; common very fine moderate-continuity tubular pores; 60 percent continuous distinct clay films on

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faces of peds; 15 percent medium prominent irregular yellowish brown (10YR 5/6) masses of oxidized iron throughout; 15 percent medium prominent irregular light brownish gray (10YR 6/2) iron depletions; very strongly acid; clear wavy boundary. Bt4—40 to 72 inches; red (2.5YR 4/6) clay; strong medium and coarse subangular blocky structure; very firm, moderately sticky, slightly plastic; common very fine moderate-continuity tubular pores; 60 percent continuous distinct clay films on faces of peds; 40 percent medium prominent irregular gray (10YR 6/1) iron depletions; 40 percent medium prominent irregular yellowish brown (10YR 5/6) masses of oxidized iron throughout; very strongly acid.

Range in Characteristics

The solum is more than 60 inches thick. The content of gravel in the A, AB, or BA horizons ranges from 0 to 35 percent, by volume. The content of gravel in the B horizon ranges from 0 to 10 percent.

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 or 3
Texture—fine sandy loam or gravelly fine sandy loam
Reaction—slightly acid to strongly acid

AB or BA horizon (where present):

Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 3 to 6
Texture—loam, fine sandy loam, clay loam, or their gravelly analogs
Reaction—slightly acid to strongly acid

E horizon (where present):

Color—hue of 10YR, value of 5 or 6, and chroma of 4
Texture—very fine sandy loam or fine sandy loam
Reaction—slightly acid to strongly acid

Bt1 horizon:

Color—hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 4 to 8
Redoximorphic features (where present)—few or common in shades of gray or brown
Texture—silty clay, clay, or clay loam
Reaction—slightly acid to strongly acid

Bt2 horizon:

Color—hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 4 to 8
Redoximorphic features—few or common mottles in shades of yellow, brown, red, or gray
Texture—silty clay, clay, or clay loam
Reaction—slightly acid to strongly acid

Bt3 horizon:

Color—hue of 10YR, value of 6, chroma of 2, and red, yellow, or brown redoximorphic features; or hue of 2.5YR to 7.5YR, value of 4 or 5, chroma of 6 to 8, and gray, brown, or yellow redoximorphic features
Texture—clay, silty clay, or clay loam
Reaction—strongly acid or very strongly acid

Bt4 horizon:

Color—variegated in shades of red, brown, yellow, and gray; or hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 5 to 8
Redoximorphic features—few or common in shades of red or brown
Texture—clay, silty clay, and clay loam
Reaction—strongly acid or very strongly acid

Btg horizon (where present):

Color—hue of 10YR, value of 6, and chroma of 2

Redoximorphic features—few to many in shades of red, yellow, or brown

Texture—clay, silty clay, or clay loam

Reaction—strongly acid or very strongly acid

Toine Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on treads of flood-plain steps

Parent material: Fine-loamy alluvium

Geology: Stanley Shale

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 0 to 2 percent

Taxonomic classification: Fine-loamy, mixed, active, thermic Ultic Hapludalfs

Associated Soils

The Toine series is commonly associated with Gurdon, Guyton, Ochlockonee, Ouachita, Ozan, Pikecreek, and Vaughn soils.

Typical Pedon

Toine fine sandy loam, 0 to 2 percent slopes, rarely flooded; in a pasture; SW¹/₄NW¹/₄ NE¹/₄ sec. 30, T. 8 S., R. 25 W.; Pike County, Arkansas; lat. 34 degrees 1 minute 51.52 seconds N. and long. 93 degrees 42 minutes 32.02 seconds W.

A—0 to 11 inches; brown (10YR 4/3) fine sandy loam; moderate medium granular structure; friable; moderately acid; clear smooth boundary.

BA—11 to 18 inches; dark yellowish brown (10YR 4/4) loam; moderate medium granular structure; friable; strongly acid; clear smooth boundary.

Bt—18 to 50 inches; strong brown (7.5YR 5/6) loam; moderate medium subangular blocky structure; friable; 5 percent patchy distinct dark yellowish brown (10YR 4/4) clay films on surfaces along root channels; very strongly acid; clear smooth boundary.

BC—50 to 69 inches; yellowish brown (10YR 5/8) fine sandy loam; weak medium subangular blocky structure; friable; very strongly acid.

Range in Characteristics

The thickness of the solum ranges from 45 to more than 72 inches. The content of coarse quartz, shale, and sandstone fragments less than 3 inches in diameter ranges from 0 to 15 percent, by volume, throughout.

A horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 2 to 4

Texture—fine sandy loam

Reaction—strongly acid to slightly acid

BA horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 3 to 6

Texture—fine sandy loam or loam

Reaction—very strongly acid to moderately acid

Bt horizon:

Color—hue of 7.5YR or 10YR, value of 4, and chroma of 4; hue of 10YR, value of 5, and chroma of 4 to 6; or hue of 7.5YR, value of 5, and chroma of 6 to 8

Texture—fine sandy loam, loam, or sandy clay loam

Reaction—strongly acid or very strongly acid

Redoximorphic features (where present)—few or common iron-manganese nodules and masses. The features are not definitive for the series.

Reaction—strongly acid or very strongly acid

BC horizon:

Color—hue of 7.5YR or 10YR, value of 4, and chroma of 4; hue of 10YR, value of 5, and chroma of 4 to 6; or hue of 7.5YR, value of 5, and chroma of 6 to 8

Texture—fine sandy loam

Reaction—strongly acid or very strongly acid

Una Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Flood plains

Position on the landscape: Linear-concave areas on treads of flood-plain steps

Parent material: Clayey alluvium

Geology: Alluvium

Drainage class: Poorly drained

Permeability: Very slow or impermeable

Soil depth class: Very deep

Shrink-swell potential: High

Slope: 0 to 1 percent

Taxonomic classification: Fine, mixed, active, acid, thermic Typic Epiaquepts

Associated Soils

The Una series is commonly associated with Billstown, Delight, and Marietta soils.

Typical Pedon

Una silty clay loam, 0 to 2 percent slopes, occasionally flooded; NW¹/₄NW¹/₄NE¹/₄ sec. 13, T. 9 S., R. 23 W.; Pike County, Arkansas; Piney Grove USGS topographic quadrangle; lat. 33 degrees 58 minutes 7.00 seconds N. and long. 93 degrees 24 minutes 39.50 seconds W.

Ap—0 to 6 inches; brown (10YR 5/3) silty clay loam; weak medium subangular blocky structure; friable; 25 percent medium faint grayish brown (10YR 5/2) iron depletions in the matrix; 2 percent fine prominent yellowish red (5YR 5/8) iron-manganese concretions; 2 percent fine prominent yellowish red (5YR 5/8) masses of oxidized iron in the matrix; strongly acid; abrupt smooth boundary.

Bg1—6 to 17 inches; light gray (10YR 7/1) silty clay loam; moderate medium subangular blocky structure; firm; 2 percent discontinuous faint clay films; many medium prominent strong brown (7.5YR 5/6) soft masses of iron accumulation; 10 percent fine iron-manganese concretions; 10 percent medium iron-manganese concretions; very strongly acid; clear smooth boundary.

Bg2—17 to 31 inches; gray (10YR 6/1) silty clay loam; moderate medium subangular blocky structure; firm, slightly sticky, slightly plastic; 2 percent patchy faint clay films; 40 percent coarse distinct masses of oxidized iron in the matrix; 10 percent fine distinct iron-manganese concretions; 10 percent medium distinct iron-manganese concretions; very strongly acid; clear smooth boundary.

Bg3—31 to 41 inches; gray (10YR 6/1) and reddish yellow (7.5YR 6/8) silty clay loam; moderate medium subangular blocky structure; firm, slightly sticky, slightly plastic;

2 percent patchy faint clay films; 15 percent coarse distinct iron-manganese masses; 15 percent medium distinct iron-manganese masses; very strongly acid; clear smooth boundary.

Bg4—41 to 72 inches; gray (10YR 6/1) silty clay loam; moderate medium subangular blocky structure; firm, slightly sticky, slightly plastic; 2 percent patchy faint clay films; 40 percent medium distinct masses of oxidized iron in the matrix; 20 percent medium prominent reddish yellow (7.5YR 6/8) iron-manganese masses; 5 percent fine iron-manganese masses; 5 percent coarse iron-manganese masses; very strongly acid.

Range in Characteristics

The solum is more than 60 inches thick. Reaction is dominantly very strongly acid or strongly acid, except in the surface layer where lime has been applied. In some pedons, however, reaction is moderately acid or neutral below a depth of 40 inches.

A or Ap horizon:

Color—hue of 10YR, value of 4 or 5, and chroma of 1 to 3

Texture—silty clay loam

Reaction—very strongly acid or strongly acid

AB horizon (where present):

Color—hue of 10YR, value of 6, and chroma of 1 or 2

Redoximorphic features—common iron accumulation in shades of brown; common iron-manganese concretions

Texture—silt loam

Bg horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 1 or 2

Redoximorphic features—few or common in shades of brown or variegated in brown and gray; few or common iron-manganese nodules, masses, or concretions

Texture—silty clay loam, silty clay, or clay

Reaction—strongly acid to neutral

BC horizon (where present):

Color—hue of 10YR, value of 6, and chroma of 1

Redoximorphic features—common or few masses of iron accumulation in shades of brown; common, few, or no iron-manganese concretions

Texture—clay loam, silty clay, loam, or their gravelly analogs

Rock fragments—0 to 40 percent

Reaction—slightly acid

Vaughn Series

Major land resource area: 135B—Cretaceous Western Coastal Plain

Geomorphic setting: Flood plains

Position on the landscape: Linear areas on flood plains

Parent material: Loamy alluvium

Geology: Alluvium

Drainage class: Well drained

Permeability: Moderately rapid

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 0 to 3 percent

Taxonomic classification: Coarse-loamy, siliceous, semiactive, thermic Typic Hapludalfs

Associated Soils

The Vaughn series is commonly associated with Gurdon, Guyton, Murfreesboro, Ochlockonee, Ouachita, and Pikecreek soils.

Typical Pedon

Vaughn gravelly loamy sand, 0 to 3 percent slopes, occasionally flooded; SE¹/₄SE¹/₄ NW¹/₄ sec. 25, T. 8 S., R. 25 W.; Pike County, Arkansas; Delight USGS topographic quadrangle; lat. 34 degrees 1 minute 33.29 seconds N. and long. 93 degrees 37 minutes 18.53 seconds W.

- A—0 to 3 inches; dark grayish brown (10YR 4/2) gravelly loamy sand; weak medium granular structure; friable; common fine, few coarse, and many very fine roots throughout; 15 percent subrounded 0.1- to 3.0-inch fragments of sandstone; moderately acid; clear wavy boundary.
- BA—3 to 10 inches; yellowish brown (10YR 5/4) gravelly sandy loam; weak fine and medium granular structure; friable; common very fine and fine and few coarse roots throughout; 15 percent rounded 0.1- to 3.0-inch fragments of sandstone; strongly acid; clear wavy boundary.
- Bt—10 to 27 inches; reddish yellow (7.5YR 6/6) sandy loam; weak fine and medium subangular blocky structure; friable; many fine, common medium, many coarse, and many very coarse roots throughout; 10 percent patchy faint clay films on bottom faces of peds; 10 percent rounded 0.1- to 3.0-inch fragments of sandstone; very strongly acid; gradual wavy boundary.
- 2BC—27 to 44 inches; brown (7.5YR 5/4) very gravelly loamy sand; weak fine subangular blocky structure; friable; common medium and few coarse roots throughout; 50 percent rounded 0.1- to 3.0-inch fragments of sandstone; strongly acid.

Range in Characteristics

The thickness of the solum ranges from 30 to more than 60 inches. Depth to the 2BC horizon ranges from 20 to 40 inches. Reaction ranges from moderately acid to strongly acid in the A and BA horizons and from strongly acid to extremely acid in the Bw, 2BC, and 2C horizons. The content of coarse fragments ranges from 0 to 35 percent, by volume, in the A, BA, and Bw horizons, from 35 to 60 percent in the 2BC horizon, and from 35 to 90 percent in the 2C horizon.

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4; or hue of 7.5YR, value of 4, and chroma of 2 to 4

Texture—gravelly loamy sand

BA horizon:

Color—hue of 7.5YR, value of 4 or 5, and chroma of 5 or 6; hue of 10YR, value of 4 or 5, and chroma of 4 to 8; or hue of 10YR, value of 5, and chroma of 6 to 8

Texture—loamy sand, loamy fine sand, sandy loam, fine sandy loam, or their gravelly analogs

Bt horizon:

Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 to 8

Texture—sandy loam, fine sandy loam, loamy fine sand, or their gravelly analogs

2BC horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4; or hue of 7.5YR, value of 4 or 5, and chroma of 4

Texture—gravelly loamy fine sand, gravelly loamy sand, gravelly sandy loam, cobbly loamy fine sand, cobbly loamy sand, cobbly sandy loam, or their very gravelly or very cobbly analogs

2C horizon (where present):

Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4; or hue of 7.5YR, value of 4, and chroma of 4 to 6

Texture—very gravelly loamy fine sand, very gravelly loamy sand, very cobbly loamy fine sand, very cobbly loamy sand, or their extremely gravelly or extremely cobbly analogs

Wetsaw Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Stream terraces

Position on the landscape: Linear-convex areas on treads

Parent material: Loamy alluvium derived from sandstone and shale

Geology: Stanley Shale

Drainage class: Moderately well drained

Permeability: Slow

Soil depth class: Very deep

Shrink-swell potential: High

Slope: 1 to 6 percent

Taxonomic classification: Fine-loamy, siliceous, semiactive, thermic Aquic Paleudalfs

Associated Soils

The Wetsaw series is commonly associated with Avilla, Cupco, Mena, and Neff soils.

Typical Pedon

Wetsaw fine sandy loam, 1 to 6 percent slopes; in a pasture; SE¹/₄NW¹/₄SE¹/₄ sec. 11, T. 5 S., R. 24 W.; Pike County, Arkansas; Glenwood USGS topographic quadrangle; lat. 34 degrees 19 minutes 3.68 seconds N. and long. 93 degrees 32 minutes 12.38 seconds W.

A—0 to 2 inches; dark brown (10YR 3/3) fine sandy loam; weak fine granular structure; friable; slightly acid; clear smooth boundary.

BA—2 to 6 inches; strong brown (7.5YR 4/6) fine sandy loam; weak fine subangular blocky structure; friable; moderately acid; clear smooth boundary.

Bt1—6 to 18 inches; yellowish red (5YR 5/8) loam; weak medium subangular blocky structure; friable; 15 percent patchy distinct strong brown (7.5YR 4/6) clay films on bottom faces of peds; moderately acid; clear smooth boundary.

Bt2—18 to 36 inches; yellowish red (5YR 5/6) clay loam; moderate medium subangular blocky structure; firm; 30 percent discontinuous faint yellowish red (5YR 4/6) clay films on faces of peds; 20 percent medium distinct irregular extremely weakly cemented iron depletions in the matrix; moderately acid; clear smooth boundary.

2Bt3—36 to 72 inches; light brownish gray (10YR 6/2), yellowish red (5YR 5/6), and light yellowish brown (10YR 6/4) silty clay loam; moderate medium subangular blocky structure; firm; 30 percent discontinuous faint yellowish red (5YR 4/6) clay films on faces of peds; 5 percent subrounded very strongly cemented fragments of sandstone; strongly acid.

Range in Characteristics

The solum is more than 60 inches thick.

A horizon:

Color—hue of 10YR, value of 3 to 5, and chroma of 2 or 3

Texture—fine sandy loam

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Rock fragments—0 to 15 percent sandstone fragments less than 10 inches in diameter

Reaction—moderately acid or strongly acid, except where amendments have been applied

BA horizon:

Color—hue of 7.5YR, value of 4 or 5, and chroma of 4 to 6; or hue of 10YR, value of 5 or 6, and chroma of 4

Texture—loam or fine sandy loam

Rock fragments—0 to 15 percent sandstone fragments less than 3 inches in diameter

Reaction—moderately acid to very strongly acid

Bt horizon:

Color—hue of 5YR to 10YR, value of 5, and chroma of 6 to 8

Texture—clay loam or loam

Redoximorphic features—depletions and accumulations in shades of brown, yellow, and gray

Rock fragments—0 to 15 percent sandstone fragments less than 3 inches in diameter

Reaction—strongly acid or very strongly acid

2Bt horizon (where present):

Color—hue of 7.5YR or 10YR, value of 5 or 6, and chroma of 6 to 8; or no dominant matrix hue and variegated in shades of brown, red, yellow, and gray

Texture—clay loam, loam, sandy clay loam, or their gravelly analogs

Redoximorphic features—accumulations and depletions in shades of red, brown, yellow, and gray

Rock fragments—0 to 35 percent sandstone fragments less than 3 inches in diameter

Reaction—strongly acid or very strongly acid

Woodall Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Flood plains

Position on the landscape: Linear-concave areas on treads of flood-plain steps

Parent material: Loamy alluvium derived from sandstone

Geology: Stanley Shale

Drainage class: Poorly drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Low

Slope: 0 to 2 percent

Taxonomic classification: Coarse-loamy, siliceous, active, thermic Typic Endoaqualfs

Associated Soils

The Woodall series is commonly associated with Bonnerdale, Dela, Kenn, Mazarn, and Speer soils.

Typical Pedon

Woodall fine sandy loam, 0 to 2 percent slopes, occasionally flooded; NW¹/₄SW¹/₄SW¹/₄NE¹/₄ sec. 34, T. 5 S., R. 25 W.; Pike County, Arkansas; Lodi USGS topographic quadrangle; lat. 34 degrees 16 minutes 0.11 second N. and long. 93 degrees 39 minutes 49.45 seconds W.

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- Ap—0 to 4 inches; dark grayish brown (10YR 4/2) fine sandy loam; weak fine granular structure; friable; 10 percent medium distinct irregular light brownish gray (10YR 6/2) iron depletions in the matrix; 10 percent fine distinct irregular yellowish brown (10YR 5/6) masses of oxidized iron lining pores; 5 percent fine irregular strongly cemented black (10YR 2/1) iron-manganese concretions throughout; 5 percent fine distinct irregular dark yellowish brown (10YR 4/6) masses of oxidized iron lining pores; strongly acid; abrupt smooth boundary.
- BA—4 to 7 inches; grayish brown (10YR 5/2) very fine sandy loam; weak fine subangular blocky structure; friable; 15 percent medium distinct irregular yellowish brown (10YR 5/6) masses of oxidized iron lining pores; 15 percent fine distinct irregular strong brown (7.5YR 4/6) masses of oxidized iron lining pores; 1 percent fine distinct irregular strongly cemented iron-manganese concretions throughout; strongly acid; clear smooth boundary.
- Bg—7 to 19 inches; grayish brown (10YR 5/2) very fine sandy loam; weak medium subangular blocky structure; friable; 10 percent medium distinct irregular dark yellowish brown (10YR 4/6) masses of oxidized iron on faces of peds; 10 percent medium distinct irregular yellowish brown (10YR 5/6) masses of oxidized iron on faces of peds; 5 percent fine distinct irregular strongly cemented iron-manganese concretions throughout; very strongly acid; clear smooth boundary.
- Btg1—19 to 35 inches; light brownish gray (10YR 6/2) very fine sandy loam; weak coarse subangular blocky structure; friable; 5 percent patchy faint grayish brown (10YR 5/2) clay films on surfaces along pores; 30 percent medium faint irregular light yellowish brown (10YR 6/4) masses of oxidized iron on faces of peds; 10 percent medium distinct irregular brownish yellow (10YR 6/6) masses of oxidized iron on faces of peds; 9 percent fine irregular strongly cemented iron-manganese concretions throughout; 5 percent fine distinct irregular strong brown (7.5YR 5/6) masses of oxidized iron lining pores; 1 percent fine distinct irregular weakly cemented black (10YR 2/1) manganese masses on surfaces along root channels; very strongly acid; clear smooth boundary.
- Btg2—35 to 48 inches; light brownish gray (10YR 6/2) loam; weak medium subangular blocky structure; friable; 5 percent patchy faint pale brown (10YR 6/3) clay films on surfaces along pores; 25 percent coarse distinct irregular light yellowish brown (2.5Y 6/4) masses of oxidized iron in the matrix; 10 percent medium distinct irregular yellowish brown (10YR 5/6) masses of oxidized iron in the matrix; 10 percent medium irregular strongly cemented iron-manganese concretions throughout; 5 percent fine distinct irregular brownish yellow (10YR 6/6) masses of oxidized iron lining pores; 1 percent fine prominent irregular weakly cemented black (10YR 2/1) manganese masses on surfaces along root channels; very strongly acid; clear wavy boundary.
- Btg3—48 to 57 inches; light brownish gray (2.5Y 6/2) and light brownish gray (10YR 6/2) loam; weak medium prismatic structure; friable; 15 percent patchy faint pale brown (10YR 6/3) clay films on surfaces along pores; 10 percent fine distinct irregular yellowish brown (10YR 5/6) masses of oxidized iron on faces of peds; 5 percent fine prominent irregular weakly cemented very dark grayish brown (10YR 3/2) iron-manganese masses throughout; 5 percent fine irregular strongly cemented iron-manganese concretions throughout; 1 percent fine distinct irregular strong brown (7.5YR 4/6) masses of oxidized iron on faces of peds; very strongly acid; gradual wavy boundary.
- Btg4—57 to 80 inches; grayish brown (10YR 5/2) loam; moderate coarse prismatic structure; friable; 25 percent patchy distinct strong brown (7.5YR 4/6) clay films on surfaces along pores; 15 percent medium distinct irregular yellowish brown (10YR 5/6) masses of oxidized iron in the matrix; 10 percent medium faint irregular gray (10YR 6/1) iron depletions on faces of peds; 10 percent medium irregular strongly cemented iron-manganese concretions throughout; 5 percent medium prominent

irregular weakly cemented black (10YR 2/1) manganese coatings on faces of peds; very strongly acid.

Range in Characteristics

The solum is more than 60 inches thick.

A or Ap horizon:

Color—hue of 10YR, value of 4, and chroma of 2 to 4; or hue of 10YR, value of 5 or 6, and chroma of 2 or 3

Texture—fine sandy loam or very fine sandy loam

Redoximorphic features—accumulations and depletions in shades of brown, yellow, and gray

Rock fragments—0 to 10 percent sandstone fragments less than 3 inches in diameter

Reaction—slightly acid to strongly acid, except where amendments have been applied

BA horizon:

Color—hue of 10YR, value of 4 to 7, and chroma of 2 to 4

Texture—fine sandy loam, very fine sandy loam, or sandy loam

Rock fragments—0 to 10 percent sandstone fragments less than 3 inches in diameter

Reaction—slightly acid to strongly acid

Bg horizon (where present):

Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2

Texture—fine sandy loam, very fine sandy loam, or sandy loam

Redoximorphic features—accumulations and depletions in shades of brown, yellow, and gray

Rock fragments—0 to 10 percent sandstone fragments less than 3 inches in diameter

Reaction—slightly acid to strongly acid

Upper part of the Btg horizon:

Color—hue of 10YR, value of 5 to 7, and chroma of 1 or 2

Texture—fine sandy loam, very fine sandy loam, sandy loam, or loam

Redoximorphic features—accumulations and depletions in shades of brown, yellow, and gray

Rock fragments—0 to 10 percent sandstone fragments less than 3 inches in diameter

Reaction—neutral to strongly acid

Lower part of the Btg horizon:

Color—hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 1 or 2

Texture—fine sandy loam, very fine sandy loam, sandy loam, or their gravelly analogs

Redoximorphic features—accumulations and depletions in shades of brown, yellow, and gray

Rock fragments—0 to 35 percent sandstone fragments less than 3 inches in diameter

Reaction—slightly alkaline to slightly acid

Yanush Series

Major land resource area: 119—Ouachita Mountains

Geomorphic setting: Mountainsides and hillsides

Position on the landscape: Convex areas on summits and linear-convex areas on shoulders and backslopes

Parent material: Gravelly colluvium derived from novaculite

Geology: Arkansas Novaculite

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Very deep

Shrink-swell potential: Moderate

Slope: 1 to 60 percent

Taxonomic classification: Loamy-skeletal, siliceous, active, thermic Typic Paleudalfs

Associated Soils

The Yanush series is commonly associated with Avant, Bengal, and Bigfork soils.

Typical Pedon

Yanush very gravelly silt loam, 1 to 8 percent slopes (fig. 27); in a forested area; NW¹/₄SE¹/₄SE¹/₄ sec. 9, T. 5 S., R. 26 W.; Pike County, Arkansas; Langley USGS topographic quadrangle; lat. 34 degrees 19 minutes 16.92 seconds N. and long. 93 degrees 47 minutes 0.67 second W.

A—0 to 5 inches; brown (10YR 4/3) very gravelly silt loam; weak fine granular structure; friable; 50 percent angular 0.1- to 3.0-inch fragments of novaculite; strongly acid; clear smooth boundary.

E—5 to 12 inches; yellowish brown (10YR 5/4) very gravelly silt loam; weak fine subangular blocky structure; friable; 40 percent angular very strongly cemented 0.1- to 3.0-inch fragments of novaculite; strongly acid; clear smooth boundary.

BE—12 to 19 inches; strong brown (7.5YR 5/6) very gravelly silt loam; weak medium subangular blocky structure; friable; 40 percent angular very strongly cemented 0.1- to 3.0-inch fragments of novaculite; strongly acid; clear smooth boundary.

Bt1—19 to 33 inches; yellowish red (5YR 5/6) very gravelly silty clay loam; moderate medium subangular blocky structure; firm; 30 percent discontinuous distinct strong brown (7.5YR 5/6) clay films on faces of peds; 40 percent angular very strongly cemented 0.1- to 3.0-inch fragments of novaculite; very strongly acid; gradual smooth boundary.

Bt2—33 to 80 inches; red (2.5YR 4/8) very gravelly silty clay loam; moderate medium subangular blocky structure; firm; 30 percent discontinuous distinct yellowish red (5YR 5/6) clay films on faces of peds; 50 percent angular very strongly cemented 0.1- to 3.0-inch fragments of novaculite; very strongly acid.

Range in Characteristics

The thickness of the solum and depth to bedrock are more than 60 inches.

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 to 4

Texture—gravelly silt loam, cobbly silt loam, stony silt loam, very gravelly silt loam, or very stony silt loam

Rock fragments—25 to 60 percent, by volume, novaculite and chert fragments; 15 to 40 percent less than 3 inches in diameter and 10 to 20 percent larger than 3 inches in diameter

Reaction—slightly acid to strongly acid, except where amendments have been applied

E horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 2 to 8

Texture—gravelly silt loam, gravelly loam, very gravelly silt loam, very gravelly loam, stony loam, stony silt loam, cobbly silt loam, cobbly loam, very cobbly silt loam, or very cobbly loam



Figure 27.—Typical profile of a Yanush soil.

Rock fragments—15 to 60 percent novaculite and/or chert fragments up to 10 inches in diameter

Reaction—slightly acid to very strongly acid

BE horizon:

Color—hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 4 to 8

Texture—gravelly silt loam, cobbly silt loam, gravelly loam, cobbly loam, very gravelly loam, or very cobbly loam

Rock fragments—15 to 60 percent novaculite and/or chert fragments up to 10 inches in diameter

Reaction—moderately acid to very strongly acid

Bt horizon:

Color—hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 to 8; or hue of 7.5YR, value of 5, and chroma of 6 to 8

Texture—very gravelly silty clay loam, very gravelly clay loam, very cobbly silty clay loam, very cobbly clay loam, extremely gravelly silty clay loam, or extremely gravelly clay loam

Rock fragments—35 to 75 percent novaculite and/or chert fragments less than 10 inches in diameter

Reaction—moderately acid to very strongly acid

Zafra Series

Major land resource area: 119—Ouachita Mountains

Local physiographic area: Laurel Creek

Geomorphic setting: Mountainsides and hillsides

Position on the landscape: Linear-convex areas on backslopes

Parent material: Gravelly residuum weathered from sandstone

Geology: Jackfork Sandstone

Drainage class: Well drained

Permeability: Moderate

Soil depth class: Moderately deep to paralithic bedrock

Shrink-swell potential: Low

Slope: 15 to 60 percent

Taxonomic classification: Loamy-skeletal, siliceous, semiactive, thermic Typic Hapludults

Associated Soils

The Zafra series is commonly associated with Carnasaw, Clebit, Nashoba, Pirum, and Sherless soils.

Typical Pedon

Zafra stony fine sandy loam in a forested area of Carnasaw-Zafra-Clebit complex, 15 to 35 percent slopes, rubbly; NE¹/₄NW¹/₄NE¹/₄ sec. 30, T. 6 S., R. 25 W.; Pike County, Arkansas; Narrows Dam USGS topographic quadrangle; lat. 34 degrees 12 minutes 21.89 seconds N. and long. 93 degrees 41 minutes 56.86 seconds W.

A—0 to 2 inches; dark grayish brown (10YR 4/2) stony fine sandy loam; weak fine granular structure; friable; 20 percent subangular very strongly cemented fragments of sandstone; strongly acid; clear smooth boundary.

E—2 to 5 inches; yellowish brown (10YR 5/4) gravelly fine sandy loam; weak fine subangular blocky structure; friable; 20 percent subangular very strongly cemented fragments of sandstone; strongly acid; clear smooth boundary.

BE—5 to 9 inches; yellowish brown (10YR 5/6) gravelly fine sandy loam; weak medium subangular blocky structure; friable; 30 percent subangular very strongly cemented fragments of sandstone; very strongly acid; clear smooth boundary.

Bt1—9 to 14 inches; strong brown (7.5YR 5/6) very gravelly loam; moderate medium subangular blocky structure; friable; 20 percent patchy distinct yellowish brown

(10YR 5/6) clay films on bottom faces of peds; 40 percent subangular very strongly cemented fragments of sandstone; very strongly acid; clear smooth boundary.

Bt2—14 to 26 inches; yellowish red (5YR 5/6) very gravelly clay loam; moderate coarse subangular blocky structure; firm; 30 percent discontinuous distinct strong brown (7.5YR 5/6) clay films on bottom faces of peds; 40 percent subangular very strongly cemented fragments of sandstone; very strongly acid; gradual smooth boundary.

BC—26 to 38 inches; strong brown (7.5YR 5/8) very gravelly clay loam; moderate medium subangular blocky structure; firm; 50 percent subangular very strongly cemented fragments of sandstone; abrupt smooth boundary.

Cr—38 to 42 inches; red, brown, and gray, soft, acid sandstone that is fractured and tilted; abrupt smooth boundary.

R—42 to 43 inches; hard, unweathered sandstone with thin layers of shale and soft sandstone tilted at 20 to 60 degrees from horizontal.

Range in Characteristics

The thickness of the solum ranges from 20 to 56 inches. Depth to hard rock ranges from 25 to 60 inches. The coarse fragments are angular pieces of hard and soft sandstone with minor amounts of shale.

A horizon:

Color—hue of 10YR, value of 3 or 4, and chroma of 2 or 3. Where value is 3, the horizon is 6 inches thick or less.

Texture—stony fine sandy loam or very stony fine sandy loam

Reaction—moderately acid or strongly acid

Rock fragments—15 to 60 percent

E horizon:

Color—hue of 10YR, value of 5 or 6, and chroma of 3 or 4; or hue of 7.5YR, value of 5 or 6, and chroma of 6

Texture—stony fine sandy loam or very stony fine sandy loam

Reaction—moderately acid or strongly acid

Rock fragments—15 to 60 percent

BE horizon:

Color—hue of 10YR, value of 5, and chroma of 4 to 8; hue of 5YR or 7.5YR, value of 5, and chroma of 6 to 8; or hue of 5YR, value of 6, and chroma of 6 to 8

Texture—loam or gravelly loam

Rock fragments—0 to 2 percent fragments larger than 3 inches in diameter and 10 to 25 percent fragments smaller than 3 inches in diameter

Bt1 horizon:

Color—hue of 7.5YR, value of 4, and chroma of 4; hue of 7.5YR, value of 5, and chroma of 6 to 8; or hue of 2.5YR or 5YR, value of 4 or 5, and chroma of 6 to 8

Texture—gravelly or very gravelly analogs of loam, clay loam, or sandy clay loam

Rock fragments—0 to 5 percent fragments larger than 3 inches in diameter and 35 to 70 percent fragments less than 3 inches in diameter

Bt2 horizon:

Color—hue of 5YR, value of 4 or 5, and chroma of 6 to 8; or hue of 7.5YR, value of 5, and chroma of 6 to 8

Texture—gravelly or very gravelly analogs of loam, clay loam, sandy clay loam, or sandy loam

Rock fragments—0 to 5 percent fragments larger than 3 inches in diameter and 35 to 70 percent fragments less than 3 inches in diameter

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BC horizon:

Color—hue of 5YR, value of 4 or 5, and chroma of 6 to 8; or hue of 7.5YR, value of 5, and chroma of 6 to 8

Texture—gravelly loam, gravelly clay loam, very gravelly clay loam, or very gravelly sandy clay loam

Rock fragments—0 to 5 percent fragments larger than 3 inches in diameter and 35 to 70 percent fragments less than 3 inches in diameter

Cr horizon:

This horizon consists of soft sandstone in shades of red, brown, and yellow with thin, alternating beds of shale and hard sandstone.

R layer:

This layer consists of hard sandstone with thin layers of shale and soft sandstone tilted at 20 to 60 degrees from horizontal.

Formation of the Soils

This section relates the factors of soil formation to the soils in the county. It also describes the processes of soil formation.

Factors of Soil Formation

Soil forms through processes acting on geologic material over time. The characteristics of a soil at any given point are determined by the physical and mineral composition of the parent material; the climate under which the parent material accumulated and has existed since accumulation; the plant and animal life on and in the soil; the relief, or lay of the land; and the length of time that the forces of soil formation have acted on the soil material. All of these factors are important in the formation of any soil, but the influence of each varies from place to place.

Climate

The climate of Pike County is characterized by relatively short, cool winters and long, hot summers with adequate rainfall. The present climate is probably similar to the climate under which the soil in the county formed. The average daily maximum temperature is about 92 degrees F during the summer and about 56 degrees F during the winter. The average annual rainfall is about 52 inches and generally is well distributed throughout the year. For additional information about the climate of the county, refer to the section "General Nature of the Survey Area."

The warm, moist climate in the survey area promotes rapid soil formation and encourages rapid chemical reactions. The large amount of water that moves through the soil is instrumental in moving dissolved or suspended materials downward in the soil profile. Plant remains decompose rapidly, and the organic acid that forms hastens the removal of carbonates and the formation of clay. Because the soil is frozen only to a shallow depth and only for a relatively short period, soil development continues almost year around. The climate throughout the county is relatively uniform. The effects of the climate on soil formation are modified locally by elevation and slope aspect. Climate alone does not account for the differences between the soils in the survey area.

Living Organisms

The vegetation under which a soil forms influences soil properties, such as color, structure, reaction, and content and distribution of organic matter. Vegetation extracts water from the soil, recycles nutrients, and adds organic matter to the soil. Gases derived from root respiration combine with water to form acids that influence the weathering of minerals. Because of a lower content of organic matter, soils that formed under forest vegetation are generally lighter colored than those that formed under grasses.

Bacteria, fungi, and many other microorganisms decompose organic matter and release nutrients to growing plants. They influence the formation of soil structure. Soil properties, such as drainage, temperature, and reaction, influence the types of

microorganisms that live in the soil. Fungi are generally more active in acid soils, whereas bacteria are more active in less acid, more alkaline soils.

Earthworms, insects, and small burrowing animals mix the soil and create small channels that aid in soil aeration and water movement. Earthworms help to incorporate crop residue and other organic matter into the soil. The organic matter improves tilth. In areas that are well populated with earthworms, the leaf litter that accumulates is generally incorporated into the soil by the following spring. Where the earthworm population is low, part of the leaf litter can remain on the surface for several years.

Human activity can significantly influence soil formation. The clearing of native forests followed by continuous farming can drastically change activities within the soil. Cultivation generally accelerates erosion on sloping soils, affects soil structure and compaction, and lowers the content of organic matter. Drainage of wet soil changes soil formation. Applications of fertilizer, lime, and pesticide also affect soil formation. Mining and urban development significantly affect soil development.

Before Pike County was settled, the native vegetation had more influence on soil formation. The survey area was covered with forests. They dominantly consisted of mixed stands of loblolly pine and hardwoods in the Cretaceous Western Coastal Plain and mixed stands of shortleaf pine and hardwoods in the Ouachita Mountains. Prairie grasses mixed with a few hardwoods grew in the marl and chalk areas of the Western Cretaceous Coastal Plain. The bottom lands in all parts of the county were covered mainly with forests of mixed hardwoods.

Relief

The relief in Pike County varies greatly. In the Ouachita Mountains, the relief is primarily the result of repeated uplifts and downthrows of Paleozoic rocks and the subsequent geologic erosion and entrenchment of streams and drainage channels into the land surface. In the Cretaceous Western Coastal Plain, the relief is primarily the result of geologic erosion and entrenchment of streams and drainage channels into the land surface.

The highest point in the survey area, about 1,780 feet above sea level, is on Hog Pen Mountain on the northern boundary of the county. The lowest point, about 70 feet above sea level, is at the junction of the Antoine River and the Little Missouri River in the southeastern corner of the county.

Some of the greatest differences between the soils of Pike County are caused by differences in relief, which affects drainage, runoff, erosion, and movement of water through the soil. The relief ranges from level on flood plains to nearly vertical at escarpments.

Some soils on the steeper slopes, narrow ridges, and hilltops are shallow because of material losses caused by geologic erosion. Clebit and Bismarck soils are examples. Soils on gently sloping interfluvies lose little soil material. Pikecity and Sherless soils are examples.

Ceda and Kenn soils, which are on nearly level flood plains, formed in deep, loamy and gravelly material that washed down from the hills of the Ouachita Mountains and was deposited on the flood plains. Progressive stream entrenchment left the Kenn soils in slightly higher positions than the Ceda soils.

The soils on the flood plains along streams in the survey area are level or nearly level and are subject to flooding unless protected by upstream flood-control structures. Typical soils on the flood plains include Dela, Guyton, Leeper, Ouachita, Pikecreek, and Sardis soils. These soils formed in deep, sandy, loamy, and clayey alluvium.

Time

The length of time that climate, living organisms, and relief act upon the parent material affects the kind of soil that forms. In general, soils that do not have definite

horizons are young or immature. Soils that have well-defined horizons are old or mature.

In terms of geologic time, most of the soils in Pike County are old regardless of if they are on mountaintops, hillsides, or stream terraces. The young soils formed either in alluvium along streams or in residuum where geologic erosion has nearly kept pace with weathering of the bedrock.

The soils on hills in the Ouachita Mountains formed in material that weathered from rocks of the Ordovician or Pennsylvanian Period. Most of the cations have been leached out, and the soils are strongly acid. There has been considerable weathering and translocation of clay, and the horizons are clearly expressed. Because iron has also been translocated from the A horizon to the B horizon and then oxidized, the B horizon has stronger red, brown, and yellow colors than the A horizon. In addition, some organic matter has accumulated in the A horizon and resulted in dark colors in the A horizon. Carnasaw, Sherless, and Littlefir soils are typical of the soils in the Ouachita Mountains and clearly show the effects of time acting with the other soil forming factors on parent material.

Soils on hillsides and interfluvies in the Cretaceous Western Coastal Plain formed in material that weathered from marine sediments. Some of these soils developed in clay marls and cherts and originally had very high concentrations of cations. These soils have been subject to leaching but still have fairly high concentrations of cations. They range from slightly acid to moderately alkaline. Most of the horizons in these soils are weakly expressed. Because some iron has been translocated from the A horizon to the B horizon and then oxidized, the B horizon has somewhat stronger red, brown, and yellow colors than the A horizon. Some organic matter has accumulated in the A horizon and, to a minor extent, in the B horizon. This accumulation has resulted in darker colors in those horizons. Billstown soils are typical of the soils that formed in clay marls and cherts and clearly show the effects of time acting with other the soil forming factors on parent material.

Other soils in the Cretaceous Western Coastal Plain formed in more acid marine sediments and did not have as high a concentration of cations. In such soils, most of the cations have been leached out and reaction is strongly acid or very strongly acid. There has been considerable weathering and translocation of clay, and the horizons are clearly expressed. Because iron has also been translocated from the A horizon to the B horizon and then oxidized, the B horizon has stronger red, brown, and yellow colors than the A horizon. In addition, some organic matter has accumulated in the A horizon and has resulted in dark colors in the A horizon.

The youngest soils in Pike County are on flood plains. These soils formed in recent alluvium on the flood plains of the major streams. No definite horizons have formed below the A horizon; instead, these soils still have depositional bedding planes. They have no soil structure other than in the A horizon. Base saturation is generally higher in these soils than in the surrounding upland soils. The content of organic matter generally decreases irregularly with depth. Ceda, Kenn, and Pikecreek soils are typical of the young soils on flood plains.

Parent Material and Geology

Roy Crutchfield, geologist, Natural Resources Conservation Service, and Charles Stone and Douglas Hanson, Arkansas Geologic Commission, contributed to this section.

Pike County is characterized by two major land resource areas: the Ouachita Mountains and the Cretaceous Western Gulf Coastal Plain. Most of the soils in the Ouachita Mountains area formed in materials that weathered from consolidated bedrock of the Ordovician through Pennsylvanian Periods of the Paleozoic Era. The rocks in the Ouachita Mountains are primarily Paleozoic sandstone, shale, novaculite, and chert. Most of the soils of the Coastal Plain formed in material deposited in and along the margin of a shallow sea. In the northern portion of the Coastal Plain,

however, many of the soils formed in material deposited from the nearby Ouachita Mountains. This formation process occurred mainly during the Cretaceous through Quaternary Periods.

The following sections include descriptions and general characterizations of the geologic formations and of the correlations each have to the major soil series in Pike County. For each region, the formations are listed from oldest to youngest.

Formations of The Ouachita Mountains

The Arkansas Novaculite formed during the Devonian and Mississippian ages. It is in the extreme northern portion of the county. Novaculite is a hard, even-textured rock comprised essentially of recrystallized silica. It is typically white to light gray and resembles unglazed porcelain in appearance and texture. Three divisions of this formation are recognized. The lower division is a massive, white novaculite. The middle division is dark novaculite and layers of chert interbedded with olive green to black shale. The upper division is white, commonly tripolitic and calcareous, thin-bedded novaculite. The Arkansas Novaculite is extremely resistant and forms tall, sharp-crested ridges along east-west belts. Novaculite is best known as a raw material for the knife-shaping stones known as whetstones. Yanush soils formed in the colluvium from novaculite and chert. Bigfork soils formed in material weathered from novaculite. Avant soils formed in material weathered from fractured and folded chert. Bengal and Carnasaw soils formed in material from weathered shale.

The Stanley Shale formed during the Late Mississippian age and is composed of black, brown, and olive-gray shale with lesser quantities of thin to massive, fine grained, silty sandstone and some chert layers. Conglomerate, quartzose sandstone, and tuff may be found in the lower part, and chert is sometimes found in the middle and upper parts. Quartz crystal may also be found in the Stanley Shale Formation. The weathering of the sandstone in the Stanley Shale results in valleys with a series of low hills. Littlefir and Bismarck soils form in material weathered from the shale. Sherless, Sherwood, and Nashoba soils formed in material weathered from the sandstone.

The Johns Valley Shale is of Early Pennsylvanian age. It consists primarily of grayish-black shale with thinly interbedded layers of grayish brown sandstone and some grayish black, siliceous shale and chert. The Johns Valley Shale typically forms hills adjacent to large mountains. Bengal, Bismarck, and Carnasaw soils formed in materials weathered from the shale. Clebit, Pirum, Sherless, and Sherwood soils formed in the material weathered from the sandstone.

The Jackfork Sandstone is of Early Pennsylvanian age. It consists of thin to massive, light brown to gray, fine-grained, quartzitic sandstone; blue-black to brown siltstone; and interbedded gray-black shale. The massive sandstone is fairly resistant to weathering and typically forms high ridges with many rock exposures. Minor conglomerates composed of quartz, chert, and metaquartzite are notable in the southern exposures of the formation. Clebit, Nashoba, Pirum, Sherless, and Sherwood soils formed in material weathered from the sandstone. Carnasaw and Littlefir soils formed in material weathered from the shale.

The Atoka Formation is of the Pennsylvanian Period. The formation is a sequence of marine, mostly tan to gray, silty sandstone and grayish black shale. Abundant sedimentary features and trace fossils indicate deep-marine, turbid deposition. Some beds have a sheared appearance, and shale fragments have developed a sheen. The shale weathers to tannish gray, and the sandstone weathers to light or dark brown. Minor beds of black, siliceous shale, chert, and conglomerate sandstone are present. Some sandstone contains traces of coalified plant remains. Carnasaw soils formed in material weathered from the shale. Pirum, Sherless, and Sherwood soils formed in material weathered from the sandstone.

Formations of the Cretaceous Western Gulf Coastal Plain

The Trinity Group is of the Early Cretaceous Period. The Trinity Group is composed of sand, gravel, clay, limestone, and evaporate deposits. Exposed members of the Trinity Group include the Pike Gravel, Dierks Limestone, and DeQueen Limestone.

The Pike Gravel has been deposited as terrace- and flood plain-sediments in the present stream valleys. The gravel from the Cretaceous age is believed to have been deposited in a beach environment during the northward advance of the early Cretaceous Sea across the southern Arkansas area. The Pike Gravel is composed mainly of sandstone, quartz, and chert pebbles and cobbles derived from Paleozoic strata, which outcrop in the Ouachita Mountains to the north. Peanutrock, Pikecity, and Stelltown soils formed in the Pike Gravel.

The Dierks Limestone occurs in small amounts. It consists of interbedded calcareous clay and fossiliferous limestone. It is in the lower part of the Trinity Group.

The DeQueen Limestone is in the middle part of the Trinity Group and is composed of interbedded green and gray, calcareous clay, limestone, gypsum, and celestite. The limestone is mainly thin bedded and sandy, but crystalline and fossiliferous intervals are present. Gypsum deposits are mined in the Nathan area. The gypsum formed as thin, interbedded strata with marine sedimentary deposits in shallow seas of the Cretaceous age. Billstown, Delight, and Japany soils formed in the DeQueen Limestone.

The Woodbine Formation is of Late Cretaceous age. This formation is between the Tokio (Late Cretaceous) and Trinity Formations (Early Cretaceous). The Woodbine Formation consists of water-laid, cross-bedded volcanic tuffs, tuffaceous sands, gravel, and red and gray clay. The basal part of the unit is gravel that is $\frac{1}{2}$ to 6 inches in diameter, well rounded, and, in places, cemented by iron oxides that may contain tuffaceous material to form conglomerate. The rocks are novaculite, quartz sandstone, and quartzite. Antoine, Peanutrock, Smithdale, and Tiak soils are associated with this formation.

The Tokio Formation is of Late Cretaceous age. The Tokio Formation consists of cross-bedded sand, gravel, gray clay, and volcanic ash. The source for much of the sediment in this formation was the Ouachita Mountain region. Minor lenses of sand and clay are within the gravel, and sand commonly fills the interstitial spaces around the gravel. The gravel ranges from pea sized to 6 inches in diameter and is composed of quartz, novaculite, sandstone, and quartzite. In places, the gravel is cemented by gypsum, calcite, iron oxides, or a dried clay binder to form conglomerate. Kaolin beds are in the Tokio Formation. This unit was deposited in a near-shore marine environment. Peanutrock, Pikecity, and Tiak soils are associated with this formation.

The Brownstone Marl is of Late Cretaceous age. The Brownstone Marl consists of dark gray, calcareous clay and sandy marl. It is composed of clay marl, thin limestones that are sandy in places, sandy marls, and some fine-grained sands. The colors are quite variable, depending on the degree of weathering, iron content, and other factors. The colors include combinations and shades of tan, brown, blue, green, yellow, and gray. Beds of thin, hard limestone that contain poorly preserved fossils are near the base of the unit. The marls in the formation are commonly highly fossiliferous. The Blackland Prairies are within the Brownstone Marl. The Blackland Prairies consist of dark, organic-rich marls and marlstones. The Brownstone Marl was formed as organic, limy muds deposited in near-shore areas of Cretaceous-age seas. Billstown, Delight, and Japany soils are associated with this formation.

The Ozan Formation is of Late Cretaceous age and lies upon the Brownstown Marl. The formation consists of sandy, micaceous marl with a basal lentel of sandy marl and marly sand. Near the top of the formation, the marls are more chalky. Only a limited acreage of the Ozan Formation is in Pike County. Billstown, Delight, and Japany soils are associated with this formation.

Igneous Rock Deposits in the survey area are thought to be from the earth's mantle. Isotopic dating of mica indicates these igneous intrusions occurred approximately 102 to 110 million years ago. The diamonds in the survey area are much older, as inclusions within the diamonds have been dated as 3.2 billion years old. The igneous rocks consist of three general types: lamproite, pyroclastic lamproite tuff, and epiclastics. Magmatic lamproite is a dark igneous rock. Pyroclastic lamproite tuff overlies the magmatic lamproite and is considered a source for gem-quality diamonds. The epiclastic rock formed by the mixing of tuffaceous volcanic material and local Cretaceous sediments. The Magnet variant soil is associated with the Igneous Rock Deposits.

Terrace Deposits are a complex sequence of unconsolidated gravel, sandy gravel, sand, silty sand, silt, clayey silt, and clay. Terraces are topographic features that are typically former flood plains of nearby streams or rivers. The gravel, primarily novaculite, originates from the Ouachita Mountain region and from local Cretaceous formations. The sediments form rich loamy soils. Gurdon, Murfreesboro, and Smithton soils are typical terrace soils.

Alluvial Quaternary Deposits consist of variably sized gravel overlain by unconsolidated sand, silt, and clay. The alluvium is in the flood plains along streams and rivers. The sediments form a rich loam. Gravel, primarily novaculite, originated from the Ouachita Mountain region and from local Cretaceous formations. The thickness of the deposits ranges from 0 to 25 feet. Areas of alluvium are presently receiving sediment deposition. Sediments include gravel, sand, clay, and mixtures of these. Gurdon, Guyton, Ochlockonee, Ouachita, Ozan, Pikecreek, and Vaughn soils are associated with the alluvial deposits.

Processes of Soil Formation

Soil forms through complex processes that are grouped into four general categories: additions, removals, transfers, and transformations. These processes affect soil formation in differing degrees and account for the presence of soil layers or horizons.

The horizon of maximum accumulation of humified organic matter is called the A horizon or the surface layer. The horizon of maximum leaching of dissolved or suspended materials is called the E horizon or the subsurface layer.

The B horizon lies directly below the E horizon and is called the subsoil. The B horizon is the horizon of maximum accumulation of dissolved or suspended materials, such as iron and silicate clay. Generally, this horizon has blocky structure and is firmer than the horizons directly above or below it.

The C horizon lies below the B horizon. Typically, it has been little affected by the soil forming processes, but in some places it is materially modified by weathering. In some young soils, the C horizon has been only slightly modified by living organisms and weathering and is directly below the A horizon.

The R layer generally lies below the C horizon, but it may lie directly below an A horizon or a B horizon. It is bedrock that is sufficiently coherent when moist to make hand digging with a spade impractical.

In Pike County, several processes have been active in the formation of soil horizons. Among these processes are the accumulation of organic matter, the leaching of carbonates and bases, the oxidation and reduction of iron, and the formation and translocation of silicate clay minerals. In most of the soils, more than one of these processes have been involved.

The physical weathering of rocks through heating and cooling and wetting and drying slowly breaks them into small pieces that form the parent material for the residual soils. This is most evident in the Nashoba soils.

The accumulation of organic matter in the upper part of the profile (the A horizon) is readily evident in the undisturbed areas of the Sherless soils. These soils have a light

colored subsurface layer from which organic matter, clay, and iron oxides have been removed.

Leaching of carbonates and bases has occurred in nearly all of the soils in Pike County. Generally, bases are leached downward in soils before silicate clay minerals begin to move. Most of the upland soils in the survey areas have been strongly leached with the exception of the soils that developed in clay marl and chalk in the Cretaceous Western Coastal Plain.

Oxidation of iron is evident in moderately well drained and well drained soils. Avilla, Sherless, and Yanush soils, for example, show evidence of red or brown B horizons, or subsoil layers, which indicate oxidation of iron.

The translocation of silicate clay minerals has contributed to horizon development in most of the soils in Pike County. In areas where the soils have been cultivated, most of the eluviated E horizon has been destroyed. Where it remains, the E horizon has weak granular or platy structure, has less clay than the lower horizons, and is lighter colored than the rest of the soil. Clay films generally have accumulated in pores and on faces of peds in the B horizon. Most of the soils were probably leached of carbonates and soluble salts before the translocation of silicate clay occurred.

In Pike County, leaching of bases and translocation of silicate clay are among the most important processes of horizon differentiation.

The effects of the soil forming factors are reflected in the soil profile. The profile is a succession of layers, or horizons, from the surface downward and includes at least the upper part of the parent material. The parent material has been little altered by soil forming processes. The horizons differ in one or more properties, such as color, texture, structure, consistency, porosity, or reaction.

Most soil profiles in Pike County contain three to five master horizons or layers. The master horizons or layers are designated A, E, B, C, and R. Young soils generally do not have an E or B horizon.

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487–00.

Schoeneberger, P.J., D.A. Wysocki, E.C. Benham, and W.D. Broderson, editors. 2002. Field book for describing and sampling soils. Version 2.0. U.S. Department of Agriculture, Natural Resources Conservation Service.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. <http://soils.usda.gov/technical/>.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2003. Keys to soil taxonomy. 9th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

United States Department of Agriculture, National Agricultural Statistics Service. 2002. Arkansas Agriculture Statistics.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. <http://soils.usda.gov/technical/>.

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430–VI. <http://soils.usda.gov/technical/>.

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the "National Soil Survey Handbook" (available in local offices of the Natural Resources Conservation Service or on the Internet).

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvium. Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Aspect. The direction toward which a slope faces. Also called slope aspect.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate.....	6 to 9
High	9 to 12
Very high.....	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Base slope (geomorphology). A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

Bedding plane. A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology) from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is

commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bench terrace. A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

Bottom land. An informal term loosely applied to various portions of a flood plain.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breaks. A landscape or tract of steep, rough or broken land dissected by ravines and gullies and marking a sudden change in topography.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Channery soil material. Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. See Redoximorphic features.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Claypan. A dense, compact, slowly permeable subsoil layer that contains much more clay than the overlying materials, from which it is separated by a sharply defined boundary. A claypan is commonly hard when dry and plastic and sticky when wet.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Coarse textured soil. Sand or loamy sand.

Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

Cobbly soil material. Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

COLE (coefficient of linear extensibility). See Linear extensibility.

- Colluvium.** Unconsolidated, unsorted earth material being transported or deposited on side slopes and/or at the base of slopes by mass movement (e.g., direct gravitational action) and by local, unconcentrated runoff.
- Complex slope.** Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.
- Complex, soil.** A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.
- Concretions.** See Redoximorphic features.
- Conglomerate.** A coarse grained, clastic sedimentary rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.
- Consistence, soil.** Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."
- Control section.** The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.
- Coprogeous earth (sedimentary peat).** A type of limnic layer composed predominantly of fecal material derived from aquatic animals.
- Corrosion** (geomorphology). A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.
- Corrosion** (soil survey interpretations). Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.
- Cover crop.** A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.
- Crop residue management.** Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.
- Cropping system.** Growing crops according to a planned system of rotation and management practices.
- Crown.** The upper part of a tree or shrub, including the living branches and their foliage.
- Culmination of the mean annual increment (CMAI).** The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.
- Cutbanks cave** (in tables). The walls of excavations tend to cave in or slough.
- Deferred grazing.** Postponing grazing or resting grazing land for a prescribed period.
- Delta.** A body of alluvium having a surface that is fan shaped and nearly flat; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.
- Dense layer** (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Diatomaceous earth. A geologic deposit of fine, grayish siliceous material composed chiefly or entirely of the remains of diatoms.

Dip slope. A slope of the land surface, roughly determined by and approximately conforming to the dip of the underlying bedrock.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Divided-slope farming. A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained*, *somewhat excessively drained*, *well drained*, *moderately well drained*, *somewhat poorly drained*, *poorly drained*, and *very poorly drained*. These classes are defined in the “Soil Survey Manual.”

Drainage, surface. Runoff, or surface flow of water, from an area.

Drainageway. A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.

Draw. A small stream valley that generally is shallower and more open than a ravine or gulch and that has a broader bottom. The present stream channel may appear inadequate to have cut the drainageway that it occupies.

Duff. A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

Dune. A low mound, ridge, bank, or hill of loose, windblown granular material (generally sand), either barren and capable of movement from place to place or covered and stabilized with vegetation but retaining its characteristic shape.

Earthy fill. See Mine spoil.

Ecological site. An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Eolian deposit. Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

Ephemeral stream. A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

- Erosion.** The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.
- Erosion* (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains.
Synonym: natural erosion.
- Erosion* (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.
- Erosion pavement.** A surficial lag concentration or layer of gravel and other rock fragments that remains on the soil surface after sheet or rill erosion or wind has removed the finer soil particles and that tends to protect the underlying soil from further erosion.
- Erosion surface.** A land surface shaped by the action of erosion, especially by running water.
- Escarpment.** A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Most commonly applied to cliffs produced by differential erosion.
Synonym: scarp.
- Extrusive rock.** Igneous rock derived from deep-seated molten matter (magma) deposited and cooled on the earth's surface.
- Fallow.** Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.
- Fertility, soil.** The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.
- Fibric soil material (peat).** The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.
- Field moisture capacity.** The moisture content of a soil, expressed as a percentage of the oven-dry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity*, *normal moisture capacity*, or *capillary capacity*.
- Fill slope.** A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.
- Fine textured soil.** Sandy clay, silty clay, or clay.
- Firebreak.** An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.
- First bottom.** An obsolete, informal term loosely applied to the lowest flood-plain steps that are subject to regular flooding.
- Flagstone.** A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.
- Flood plain.** The nearly level plain that borders a stream and is subject to flooding unless protected artificially.
- Flood-plain landforms.** A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include flood-plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.
- Flood-plain splay.** A fan-shaped deposit or other outspread deposit formed where an overloaded stream breaks through a levee (natural or artificial) and deposits its material (commonly coarse grained) on the flood plain.

- Flood-plain step.** An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and/or deposition. May occur individually or as a series of steps.
- Fluvial.** Of or pertaining to rivers or streams; produced by stream or river action.
- Foothills.** A region of steeply sloping hills that fringes a mountain range or high-plateau escarpment. The hills have relief of as much as 1,000 feet (300 meters).
- Footslope.** The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).
- Forb.** Any herbaceous plant not a grass or a sedge.
- Forest cover.** All trees and other woody plants (underbrush) covering the ground in a forest.
- Forest type.** A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.
- Fragipan.** A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.
- Genesis, soil.** The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.
- Gleyed soil.** Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.
- Grassed waterway.** A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.
- Gravel.** Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.
- Gravelly soil material.** Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.
- Green manure crop** (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.
- Ground water.** Water filling all the unblocked pores of the material below the water table.
- Hard bedrock.** Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.
- Hard to reclaim** (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.
- Hardpan.** A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.
- Hemic soil material (mucky peat).** Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.
- High-residue crops.** Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.
- Hill.** A generic term for an elevated area of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a

well defined outline. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.

Hillslope. A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

L horizon.—A layer of organic and mineral limnic materials, including coprogenous earth (sedimentary peat), diatomaceous earth, and marl.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Soft, consolidated bedrock beneath the soil.

R layer.—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential.

The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock that was formed by cooling and solidification of magma and that has not been changed appreciably by weathering since its formation. Major varieties include plutonic and volcanic rock (e.g., andesite, basalt, and granite).

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Interfluve. A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.

Interfluve (geomorphology). A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.

Intermittent stream. A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Iron depletions. See Redoximorphic features.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

Controlled flooding.—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Furrow.—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation.—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

Wild flooding.—Water, released at high points, is allowed to flow onto an area without controlled distribution.

Ksat. Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Landslide. A general, encompassing term for most types of mass movement landforms and processes involving the downslope transport and outward

deposition of soil and rock materials caused by gravitational forces; the movement may or may not involve saturated materials. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Large stones (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Leaching. The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $\frac{1}{3}$ - or $\frac{1}{10}$ -bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Lithic contact. A boundary between soil and a coherent underlying material. A lithic contact has few cracks that can be penetrated by roots. Commonly, the material is indurated. The material below a lithic contact must be in a strongly cemented or more cemented rupture-resistance class.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loess. Material transported and deposited by wind and consisting dominantly of silt-sized particles.

Low strength. The soil is not strong enough to support loads.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

Marl. An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal proportions; formed primarily under freshwater lacustrine conditions but also formed in more saline environments.

Mass movement. A generic term for the dislodgment and downslope transport of soil and rock material as a unit under direct gravitational stress.

Masses. See Redoximorphic features.

Meander belt. The zone within which migration of a meandering channel occurs; the flood-plain area included between two imaginary lines drawn tangential to the outer bends of active channel loops.

Meander scar. A crescent-shaped, concave or linear mark on the face of a bluff or valley wall, produced by the lateral erosion of a meandering stream that impinged upon and undercut the bluff.

Meander scroll. One of a series of long, parallel, close-fitting, crescent-shaped ridges and troughs formed along the inner bank of a stream meander as the channel migrated laterally down-valley and toward the outer bank.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement at depth in the earth's crust. Nearly all such rocks are crystalline.

Mine spoil. An accumulation of displaced earthy material, rock, or other waste material removed during mining or excavation. Also called earthy fill.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area. A kind of map unit that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size.

Descriptive terms are as follows: abundance—*few*, *common*, and *many*; size—*fine*, *medium*, and *coarse*; and contrast—*faint*, *distinct*, and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium*, from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse*, more than 15 millimeters (about 0.6 inch).

Mountain. A generic term for an elevated area of the land surface, rising more than 1,000 feet (300 meters) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range. Mountains are formed primarily by tectonic activity and/or volcanic action but can also be formed by differential erosion.

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Mudstone. A blocky or massive, fine grained sedimentary rock in which the proportions of clay and silt are approximately equal. Also, a general term for such material as clay, silt, claystone, siltstone, shale, and argillite and that should be used only when the amounts of clay and silt are not known or cannot be precisely identified.

Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules. See Redoximorphic features.

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter. Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low.....	1.0 to 2.0 percent
Moderate.....	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high.....	more than 8.0 percent

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan*, *fragipan*, *claypan*, *plowpan*, and *traffic pan*.

Paralithic contact. A contact between soil and paralithic materials. Paralithic materials are primarily unaltered and in extremely weakly cemented to moderately cemented rupture resistance classes. These materials can also be partially weathered bedrock or weakly consolidated bedrock, such as sandstone, siltstone, or shale.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedisediment. A layer of sediment, eroded from the shoulder and backslope of an erosional slope, that lies on and is being (or was) transported across a gently sloping erosional surface at the foot of a receding hill or mountain slope.

Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Percolates slowly (in tables). The slow movement of water through the soil adversely affects the specified use.

Permafrost. Ground, soil, or rock that remains at or below 0 degrees C for at least 2 years. It is defined on the basis of temperature and is not necessarily frozen.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour and micrometers per second, are as follows:

	Inches/hour	Micrometers/second
Impermeable.....	less than 0.0015	less than 0.011
Very slow	0.0015 to 0.06	0.011 to 0.42
Slow	0.06 to 0.2	0.42 to 1.41
Moderately slow.....	0.2 to 0.6	1.41 to 4.23
Moderate.....	0.6 inch to 2.0	4.23 to 14.11
Moderately rapid	2.0 to 6.0	14.11 to 42.34
Rapid	6.0 to 20	42.34 to 141.14
Very rapid.....	more than 20	more than 141.14

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plateau (geomorphology). A comparatively flat area of great extent and elevation; specifically, an extensive land region that is considerably elevated (more than 100 meters) above the adjacent lower lying terrain, is commonly limited on at least one side by an abrupt descent, and has a flat or nearly level surface. A comparatively large part of a plateau surface is near summit level.

Plinthite. The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Pore linings. See Redoximorphic features.

Potential native plant community. See Climax plant community.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Rangeland. Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid.....	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid.....	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline.....	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline.....	9.1 and higher

Redoximorphic concentrations. See Redoximorphic features.

Redoximorphic depletions. See Redoximorphic features.

Redoximorphic features. Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:

A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of

internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; *and*

B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*

C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.

2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:

A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; *and*

B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletalans).

3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

Reduced matrix. See Redoximorphic features.

Regolith. All unconsolidated earth materials above the solid bedrock. It includes material weathered in place from all kinds of bedrock and alluvial, glacial, eolian, lacustrine, and pyroclastic deposits.

Relief. The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.

Rill. A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.

Riser. The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saturated hydraulic conductivity (Ksat). See Permeability.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

- Sedimentary rock.** A consolidated deposit of clastic particles, chemical precipitates, or organic remains accumulated at or near the surface of the earth under normal low temperature and pressure conditions. Sedimentary rocks include consolidated equivalents of alluvium, colluvium, drift, and eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.
- Series, soil.** A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.
- Shale.** Sedimentary rock that formed by the hardening of a deposit of clay, silty clay, or silty clay loam and that has a tendency to split into thin layers.
- Sheet erosion.** The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.
- Shoulder.** The convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.
- Shrink-swell** (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.
- Side slope** (geomorphology). A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.
- Silica.** A combination of silicon and oxygen. The mineral form is called quartz.
- Silica-sesquioxide ratio.** The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.
- Silt.** As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.
- Siltstone.** An indurated silt having the texture and composition of shale but lacking its fine lamination or fissility; a massive mudstone in which silt predominates over clay.
- Similar soils.** Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.
- Site index.** A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.
- Slickensides** (pedogenic). Grooved, striated, and/or glossy (shiny) slip faces on structural peds, such as wedges; produced by shrink-swell processes, most commonly in soils that have a high content of expansive clays.
- Slope.** The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Level	0 to 1 percent
Nearly level	1 to 3 percent
Gently sloping	3 to 8 percent
Moderately steep	8 to 15 percent
Steep	15 to 35 percent
Very steep	35 percent and higher

- Slope alluvium.** Sediment gradually transported down the slopes of mountains or hills primarily by nonchannel alluvial processes (i.e., slope-wash processes) and characterized by particle sorting. Lateral particle sorting is evident on long

slopes. In a profile sequence, sediments may be distinguished by differences in size and/or specific gravity of rock fragments and may be separated by stone lines. Burnished peds and sorting of rounded or subrounded pebbles or cobbles distinguish these materials from unsorted colluvial deposits.

Slow refill (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.

Sodicity. The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of Na^+ to $\text{Ca}^{++} + \text{Mg}^{++}$. The degrees of sodicity and their respective ratios are:

Slight.....	less than 13:1
Moderate.....	13-30:1
Strong	more than 30:1

Sodium adsorption ratio (SAR). A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay.....	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stone line. In a vertical cross section, a line formed by scattered fragments or a discrete layer of angular and subangular rock fragments (commonly a gravel- or cobble-sized lag concentration) that formerly was draped across a topographic surface and was later buried by additional sediments. A stone line generally caps material that was subject to weathering, soil formation, and erosion before burial. Many stone lines seem to be buried erosion pavements, originally formed by sheet and rill erosion across the land surface.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Strath terrace. A type of stream terrace; formed as an erosional surface cut on bedrock and thinly mantled with stream deposits (alluvium).

Stream terrace. One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream; represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summit. The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the “plow layer,” or the “Ap horizon.”

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terrace (conservation). An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geomorphology). A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand*, *loamy sand*, *sandy loam*, *loam*, *silt loam*, *silt*, *sandy clay loam*, *clay loam*, *silty clay loam*, *sandy clay*, *silty clay*, and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying “coarse,” “fine,” or “very fine.”

Thin layer (in tables). Otherwise suitable soil material that is too thin for the specified use.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toeslope. The gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Tread. The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.

Tuff. A generic term for any consolidated or cemented deposit that is 50 percent or more volcanic ash.

Upland. An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

Valley fill. The unconsolidated sediment deposited by any agent (water, wind, ice, or mass wasting) so as to fill or partly fill a valley.

Variation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Weathering. All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an oven-dry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

Tables

Soil Survey of Pike County, Arkansas

Table 1.--Temperature and Precipitation

[Recorded in the period 1970-95 at Murfreesboro, Arkansas]

Month	Temperature						Precipitation				
	Average daily maximum	Average daily minimum	Average	2 years in 10 will have--		Average number of growing degree days*	Avg.	2 years in 10 will have--		Average of days with 0.10 inch	Average snowfall
				Max. temp. higher than	Min. temp. lower than			Less than--	More than--		
°F	°F	°F	°F	°F	Units	In	In	In		In	
January----	50.2	27.4	38.8	75	7	93	3.53	1.64	5.16	6	1.0
February---	56.5	31.1	43.8	80	10	175	3.96	2.64	5.16	5	0.8
March-----	65.6	39.4	52.5	84	20	385	5.45	3.16	7.48	6	0.1
April-----	73.4	46.7	60.0	88	27	593	5.07	2.26	7.47	6	0.0
May-----	79.4	56.0	67.7	90	40	825	5.34	3.19	7.27	8	0.0
June-----	87.1	63.9	75.5	97	49	1,047	4.63	2.06	6.82	6	0.0
July-----	91.2	67.6	79.4	102	57	1,202	5.14	2.44	7.47	5	0.0
August-----	91.2	66.4	78.8	101	56	1,171	3.43	1.72	5.18	4	0.0
September--	84.3	60.3	72.3	98	40	935	4.20	1.53	6.42	5	0.0
October----	74.6	48.5	61.6	90	30	646	5.05	1.84	7.71	5	0.0
November---	62.7	38.2	50.4	81	18	319	5.95	3.02	8.50	6	0.0
December---	54.0	31.1	42.5	74	9	154	5.18	2.53	7.49	6	0.4
Yearly:											
Average--	72.5	48.0	60.3	---	---	---	---	---	---	---	---
Extreme--	108	-2	---	103	4	---	---	---	---	---	---
Total----	---	---	---	---	---	7,545	56.93	41.77	67.18	68	2.2

* A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (40 degrees. F)

Soil Survey of Pike County, Arkansas

Table 2.--Freeze Dates in Spring and Fall

[Recorded in the period 1970-95 at Murfreesboro, Arkansas]

Probability	Temperature		
	24 °F or lower	28 °F or lower	32 °F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	Mar. 20	Apr. 4	Apr. 15
2 year in 10 later than--	Mar. 13	Mar. 30	Apr. 10
5 year in 10 later than--	Mar. 1	Mar. 20	Apr. 1
First freezing temperature in fall:			
1 year in 10 earlier than--	Nov. 6	Oct. 28	Oct. 24
2 years in 10 earlier than--	Nov. 13	Nov. 2	Oct. 28
5 years in 10 earlier than--	Nov. 26	Nov. 13	Nov. 5

Soil Survey of Pike County, Arkansas

Table 3.--Growing Season

[Recorded for the period 1970-95 at Murfreesboro, Arkansas]

Probability	Daily Minimum Temperature During growing season		
	Higher than 24 °F	Higher than 28 °F	Higher than 32 °F
	<i>Days</i>	<i>Days</i>	<i>Days</i>
9 years in 10	245	218	202
8 years in 10	253	225	208
5 years in 10	269	239	219
2 years in 10	285	253	231
1 year in 10	293	260	237

Soil Survey of Pike County, Arkansas

Table 4.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
1	Antoine loam, 1 to 6 percent slopes-----	3,806	1.0
2	Avilla fine sandy loam, 1 to 6 percent slopes-----	608	0.2
3	Avilla gravelly fine sandy loam, 1 to 6 percent slopes-----	868	0.2
4	Avilla gravelly fine sandy loam, 6 to 12 percent slopes-----	133	*
5	Bengal-Bismarck-Yanush complex, 8 to 15 percent slopes-----	444	0.1
6	Bengal-Bismarck-Yanush complex, 15 to 35 percent slopes, extremely stony----	2,658	0.7
7	Bengal-Bismarck-Bigfork complex, 35 to 60 percent slopes, extremely stony----	365	*
8	Bigfork-Rock outcrop complex, 3 to 15 percent slopes, very rubbly-----	921	0.2
9	Bigfork-Yanush-Rock outcrop complex, 35 to 60 percent slopes, rubbly-----	4,065	1.0
10	Billstown loam, 3 to 8 percent slopes-----	2,579	0.7
11	Billstown loam, 8 to 15 percent slopes-----	1,676	0.4
12	Billstown-Tiak complex, 8 to 15 percent slopes-----	2,336	0.6
13	Bonnerdale fine sandy loam, 3 to 8 percent slopes-----	7,280	1.9
14	Carnasaw-Pirum complex, 3 to 15 percent slopes, rubbly-----	2,227	0.6
15	Carnasaw-Sherless complex, 8 to 15 percent slopes-----	4,917	1.3
16	Carnasaw-Sherless complex, 15 to 35 percent slopes, extremely stony-----	13,731	3.5
17	Carnasaw-Sherwood-Zafra complex, 35 to 60 percent slopes, extremely stony----	1,091	0.3
18	Carnasaw-Zafra-Clebit complex, 15 to 35 percent slopes, rubbly-----	7,310	1.9
19	Ceda very cobbly fine sandy loam, 0 to 3 percent slopes, frequently flooded--	920	0.2
20	Ceda very gravelly loam, 0 to 3 percent slopes, frequently flooded-----	826	0.2
21	Clebit-Carnasaw-Pirum complex, 3 to 15 percent slopes, rubbly-----	347	*
22	Cupco silt loam, 0 to 2 percent slopes, rarely flooded-----	261	*
23	Dam-----	2	*
24	Dela fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	571	0.1
25	Dela fine sandy loam, 0 to 2 percent slopes, frequently flooded-----	7,506	1.9
26	Delight silty clay, 3 to 8 percent slopes-----	992	0.3
27	Gurdon fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	810	0.2
28	Guyton silt loam, 0 to 2 percent slopes, rarely flooded-----	1,471	0.4
29	Guyton silt loam, 0 to 2 percent slopes, occasionally flooded-----	6,790	1.7
30	Guyton silt loam, 0 to 1 percent slopes, ponded-----	1,143	0.3
31	Japany silty clay loam, 1 to 5 percent slopes-----	1,145	0.3
32	Kenn fine sandy loam, 0 to 2 percent slopes, rarely flooded-----	449	0.1
33	Kenn fine sandy loam, 0 to 3 percent slopes, occasionally flooded-----	2,084	0.5
34	Kenn very fine sandy loam, 0 to 2 percent slopes, frequently flooded-----	516	0.1
35	Kenn-Ceda complex, 0 to 3 percent slopes, frequently flooded-----	4,735	1.2
36	Kizzia silt loam, 3 to 8 percent slopes-----	650	0.2
37	Leeper silty clay loam, 0 to 2 percent slopes, occasionally flooded-----	551	0.1
38	Littlefir-Carnasaw complex, 1 to 8 percent slopes-----	1,632	0.4
39	Magnet variant cobbly silt loam, 15 to 35 percent slopes-----	25	*
40	Marietta loam, 0 to 2 percent slopes, occasionally flooded-----	129	*
41	Mazarn silt loam, 0 to 3 percent slopes-----	1,709	0.4
42	Mazarn silt loam, 0 to 3 percent slopes, occasionally flooded-----	875	0.2
43	McCaskill fine sandy loam, 0 to 2 percent slopes-----	3,834	1.0
44	Mena gravelly silt loam, 1 to 6 percent slopes-----	378	*
45	Mena gravelly silt loam, 6 to 12 percent slopes-----	79	*
46	Mena silt loam, 1 to 6 percent slopes-----	201	*
47	Murfreesboro gravelly loam, 1 to 6 percent slopes-----	302	*
48	Murfreesboro loam, 1 to 6 percent slopes-----	1,741	0.4
49	Nathan fine sandy loam, 3 to 8 percent slopes-----	837	0.2
50	Nashoba-Bismarck-Littlefir complex, 1 to 8 percent slopes-----	604	0.2
51	Nashoba-Bismarck-Littlefir complex, 8 to 15 percent slopes-----	2,737	0.7
52	Nashoba-Littlefir-Sherless complex, 15 to 35 percent slopes, rubbly-----	4,078	1.0
53	Neff loam, 0 to 2 percent slopes, occasionally flooded-----	426	0.1
54	Ochlockonee fine sandy loam, 0 to 2 percent slopes, rarely flooded-----	688	0.2
55	Ochlockonee fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	1,231	0.3
56	Ochlockonee fine sandy loam, 0 to 2 percent slopes, frequently flooded-----	5,188	1.3
57	Ouachita silt loam, 0 to 3 percent slopes, rarely flooded-----	178	*
58	Ouachita silt loam, 0 to 2 percent slopes, occasionally flooded-----	1,025	0.3
59	Ozan fine sandy loam, 0 to 2 percent slopes, rarely flooded-----	1,598	0.4

See footnote at end of table.

Soil Survey of Pike County, Arkansas

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
60	Ozan fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	3,866	1.0
61	Peanutrock very gravelly fine sandy loam, 3 to 8 percent slopes-----	10,742	2.7
62	Peanutrock very gravelly fine sandy loam, 8 to 15 percent slopes-----	10,943	2.8
63	Peanutrock very gravelly fine sandy loam, 15 to 35 percent slopes-----	9,535	2.4
64	Peanutrock-Tiak complex, 8 to 15 percent slopes-----	6,571	1.7
65	Pikecity silt loam, 1 to 8 percent slopes-----	9,661	2.5
66	Pikecreek gravelly loamy sand, 0 to 3 percent slopes, frequently flooded-----	260	*
67	Pirum-Sherless-Bonnerdale complex, 1 to 8 percent slopes-----	1,694	0.4
68	Pits and Udorthents association, 3 to 35 percent slopes-----	1,153	0.3
69	Riverwash-Ceda complex, 0 to 3 percent slopes, frequently flooded-----	286	*
70	Sardis silt loam, 0 to 2 percent slopes, rarely flooded-----	685	0.2
71	Sardis silt loam, 0 to 2 percent slopes, occasionally flooded-----	4,677	1.2
72	Sherless-Littlefir complex, 1 to 8 percent slopes-----	33,788	8.6
73	Sherless-Littlefir-Nashoba complex, 8 to 15 percent slopes-----	90,015	22.9
74	Sherless-Littlefir-Nashoba complex, 15 to 35 percent slopes-----	21,894	5.6
75	Sherless-Nashoba complex, 3 to 8 percent slopes, extremely stony-----	5,683	1.4
76	Smithton fine sandy loam, 0 to 2 percent slopes-----	1,119	0.3
77	Speer fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	1,943	0.5
78	Speer fine sandy loam, 0 to 2 percent slopes, rarely flooded-----	7,214	1.8
79	Stelltown sandy loam, 1 to 6 percent slopes-----	90	*
80	Stelltown sandy loam, 6 to 12 percent slopes-----	524	0.1
81	Tiak very fine sandy loam, 1 to 8 percent slopes-----	1,744	0.4
82	Tiak gravelly very fine sandy loam, 1 to 8 percent slopes-----	1,785	0.5
83	Tiak gravelly very fine sandy loam, 8 to 15 percent slopes-----	3,542	0.9
84	Tiak-Antoine complex, 1 to 8 percent slopes-----	3,514	0.9
85	Tiak-Antoine complex, 8 to 15 percent slopes-----	7,494	1.9
86	Toine fine sandy loam, 0 to 2 percent slopes, rarely flooded-----	2,615	0.7
87	Toine fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	1,978	0.5
88	Una silty clay loam, 0 to 2 percent slopes, occasionally flooded-----	500	0.1
89	Vaughn gravelly loamy sand, 0 to 3 percent slopes, occasionally flooded-----	2,154	0.5
90	Vaughn-Pikecreek complex, 0 to 3 percent slopes, frequently flooded-----	5,620	1.4
91	Water-----	8,640	2.2
92	Wetsaw fine sandy loam, 1 to 6 percent slopes-----	372	*
93	Woodall fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	4,575	1.2
94	Woodall fine sandy loam, 0 to 2 percent slopes, frequently flooded-----	850	0.2
95	Yanush very gravelly silt loam, 1 to 8 percent slopes-----	1,164	0.3
96	Yanush very gravelly silt loam, 8 to 15 percent slopes-----	354	*
97	Yanush-Avant-Bengal complex, 15 to 35 percent slopes-----	109	*
98	Yanush-Avant-Bengal complex, 35 to 60 percent slopes-----	354	*
99	Yanush-Bigfork complex, 15 to 35 percent slopes, extremely stony-----	273	*
100	Yanush-Bigfork complex, 35 to 60 percent slopes, rubbly-----	3,592	0.9
101	Zafra-Carnasaw-Clebit complex, 35 to 60 percent slopes, rubbly-----	904	0.2
	Total-----	392,755	100.0

* Less than 0.1 percent.

Soil Survey of Pike County, Arkansas

Table 5.--Prime Farmland

[Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland]

Map symbol	Map unit name	Farmland classification
1	Antoine loam, 1 to 6 percent slopes-----	All areas are prime farmland
2	Avilla fine sandy loam, 1 to 6 percent slopes-----	All areas are prime farmland
3	Avilla gravelly fine sandy loam, 1 to 6 percent slopes-----	All areas are prime farmland
13	Bonnerdale fine sandy loam, 3 to 8 percent slopes-----	All areas are prime farmland
22	Cupco silt loam, 0 to 2 percent slopes, rarely flooded-----	Prime farmland where drained and either protected from flooding or not frequently flooded during the growing season
24	Dela fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	All areas are prime farmland
25	Dela fine sandy loam, 0 to 2 percent slopes, frequently flooded-----	Prime farmland where protected from flooding or not frequently flooded during the growing season
27	Gurdon fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	Prime farmland where drained
28	Guyton silt loam, 0 to 2 percent slopes, rarely flooded----	Prime farmland where drained
29	Guyton silt loam, 0 to 2 percent slopes, occasionally flooded-----	Prime farmland where drained
30	Guyton silt loam, 0 to 1 percent slopes, ponded-----	Prime farmland where drained and either protected from flooding or not frequently flooded during the growing season
31	Japany silty clay loam, 1 to 5 percent slopes-----	All areas are prime farmland
32	Kenn fine sandy loam, 0 to 2 percent slopes, rarely flooded-	All areas are prime farmland
33	Kenn fine sandy loam, 0 to 3 percent slopes, occasionally flooded-----	All areas are prime farmland
34	Kenn very fine sandy loam, 0 to 2 percent slopes, frequently flooded-----	Prime farmland where protected from flooding or not frequently flooded during the growing season
36	Kizzia silt loam, 3 to 8 percent slopes-----	All areas are prime farmland
37	Leeper silty clay loam, 0 to 2 percent slopes, occasionally flooded-----	Prime farmland where drained
41	Mazarn silt loam, 0 to 3 percent slopes-----	All areas are prime farmland
42	Mazarn silt loam, 0 to 3 percent slopes, occasionally flooded-----	All areas are prime farmland
43	McCaskill fine sandy loam, 0 to 2 percent slopes-----	All areas are prime farmland
46	Mena silt loam, 1 to 6 percent slopes-----	All areas are prime farmland
47	Murfreesboro gravelly loam, 1 to 6 percent slopes-----	All areas are prime farmland
48	Murfreesboro loam, 1 to 6 percent slopes-----	All areas are prime farmland
49	Nathan fine sandy loam, 3 to 8 percent slopes-----	All areas are prime farmland
53	Neff loam, 0 to 2 percent slopes, occasionally flooded-----	All areas are prime farmland
54	Ochlockonee fine sandy loam, 0 to 2 percent slopes, rarely flooded-----	All areas are prime farmland
55	Ochlockonee fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	All areas are prime farmland
56	Ochlockonee fine sandy loam, 0 to 2 percent slopes, frequently flooded-----	Prime farmland where protected from flooding or not frequently flooded during the growing season
57	Ouachita silt loam, 0 to 3 percent slopes, rarely flooded---	All areas are prime farmland
58	Ouachita silt loam, 0 to 2 percent slopes, occasionally flooded-----	Prime farmland where protected from flooding or not frequently flooded during the growing season
59	Ozan fine sandy loam, 0 to 2 percent slopes, rarely flooded-	Prime farmland where drained
60	Ozan fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	Prime farmland where drained

Soil Survey of Pike County, Arkansas

Table 5.--Prime Farmland--Continued

Map symbol	Map unit name	Farmland classification
65	Pikecity silt loam, 1 to 8 percent slopes-----	All areas are prime farmland
70	Sardis silt loam, 0 to 2 percent slopes, rarely flooded----	All areas are prime farmland
71	Sardis silt loam, 0 to 2 percent slopes, occasionally flooded-----	All areas are prime farmland
76	Smithton fine sandy loam, 0 to 2 percent slopes-----	Prime farmland where drained
77	Speer fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	All areas are prime farmland
78	Speer fine sandy loam, 0 to 2 percent slopes, rarely flooded-----	All areas are prime farmland
79	Stelltown sandy loam, 1 to 6 percent slopes-----	All areas are prime farmland
86	Toine fine sandy loam, 0 to 2 percent slopes, rarely flooded-----	All areas are prime farmland
87	Toine fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	All areas are prime farmland
88	Una silty clay loam, 0 to 2 percent slopes, occasionally flooded-----	Prime farmland where drained
89	Vaughn gravelly loamy sand, 0 to 3 percent slopes, occasionally flooded-----	All areas are prime farmland
92	Wetsaw fine sandy loam, 1 to 6 percent slopes-----	All areas are prime farmland
93	Woodall fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	All areas are prime farmland
94	Woodall fine sandy loam, 0 to 2 percent slopes, frequently flooded-----	Prime farmland where protected from flooding or not frequently flooded during the growing season

Soil Survey of Pike County, Arkansas

Table 6.--Land Capability and Yields per Acre of Pasture

[Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil]

Map symbol and soil name	Land capability	Bahiagrass	Common bermudagrass	Improved bermudagrass
		AUM	AUM	AUM
1: Antoine-----	3e	7	7	9
2: Avilla-----	3e	7	7	8.5
3: Avilla-----	3e	7	7	8.5
4: Avilla-----	4e	7	7	8
5: Bengal-----	6e	3	3	4
Bismarck-----	6e	---	3	4
Yanush-----	6e	3	---	4
6: Bengal-----	7e	2	2	3
Bismarck-----	7e	---	---	---
Yanush-----	7e	---	---	---
7: Bengal-----	7s	---	---	---
Bismarck-----	7s	---	---	---
Bigfork-----	7s	---	---	---
8: Bigfork-----	6e	---	---	---
Rock outcrop.				
9: Bigfork-----	7s	---	---	---
Yanush.				
10: Billstown-----	4e	5.5	5	6
11: Billstown-----	6e	5	4	---
12: Billstown-----	6e	5.5	4.5	6
Tiak-----	6e	6	6	6

Soil Survey of Pike County, Arkansas

Table 6.--Land Capability and Yields per Acre of Pasture--Continued

Map symbol and soil name	Land capability	Bahiagrass	Common bermudagrass	Improved bermudagrass
		AUM	AUM	AUM
13: Bonnerdale-----	2e	7	7	8
14: Carnasaw-----	6s	---	---	---
Pirum-----	6s	---	5.5	6.5
15: Carnasaw-----	6e	5	5	5.5
Sherless-----	6e	5	5	5.5
16: Carnasaw-----	7s	---	---	---
Sherless-----	7s	---	---	---
17: Carnasaw-----	7s	---	---	---
Sherwood-----	7s	---	---	---
18: Carnasaw-----	7e	---	---	---
Zafra-----	7s	---	---	---
19: Ceda-----	7s	---	---	---
20: Ceda-----	5w	---	---	---
21: Clebit-----	7s	---	---	---
Carnasaw-----	6s	---	4	---
22: Cupco-----	3w	5	5	7
23: Dam.				
24: Dela-----	2w	7	7	8
25: Dela-----	5w	7	7	8
26: Delight-----	4e	---	5	6
27: Gurdon-----	2w	8	7	---
28: Guyton-----	4w	7	6	---

Soil Survey of Pike County, Arkansas

Table 6.--Land Capability and Yields per Acre of Pasture--Continued

Map symbol and soil name	Land capability	Bahiagrass	Common bermudagrass	Improved bermudagrass
		AUM	AUM	AUM
29: Guyton-----	4w	7	6	---
30: Guyton-----	7w	7	6	---
31: Japany-----	3e	7	7	8.5
32: Kenn-----	2e	7	6	7
33: Kenn-----	2e	7	6	7
34: Kenn-----	5w	7	7	8
35: Kenn-----	5w	---	5	7
Ceda-----	7s	---	---	---
36: Kizzia-----	3e	7	6.5	8
37: Leeper-----	2w	7	8	9
38: Littlefir-----	4e	5	5	6
Carnasaw-----	4e	5	5	5.5
39: Magnet-----	7s	---	---	---
40: Marietta-----	2w	7.5	6.5	8
41: Mazarn-----	3w	6	6	7
42: Mazarn-----	3w	6	6	7
43: McCaskill-----	2w	8	---	8
44: Mena-----	3e	7	7	8.5
45: Mena-----	4e	6.5	6.5	8
46: Mena-----	3e	7	7	8.5
47: Murfreesboro-----	3e	---	7	8.5

Soil Survey of Pike County, Arkansas

Table 6.--Land Capability and Yields per Acre of Pasture--Continued

Map symbol and soil name	Land capability	Bahiagrass	Common bermudagrass	Improved bermudagrass
		AUM	AUM	AUM
48: Murfreesboro-----	3e	---	7	8.5
49: Nathan-----	3e	7	6	---
50: Nashoba-----	4s	---	5	6
Bismarck-----	6e	---	3	4
Littlefir-----	4e	---	---	---
51: Nashoba-----	6e	---	3	4
Bismarck-----	6e	---	4.5	5
Littlefir-----	6e	---	---	5
52: Nashoba-----	6e	---	---	---
Littlefir-----	6s	---	---	---
Sherless-----	7e	---	---	---
53: Neff-----	2w	7	7	8
54: Ochlockonee-----	4e	6.5	7	9
55: Ochlockonee-----	2w	6.5	7	9
56: Ochlockonee-----	4w	6.5	7	9
57: Ouachita-----	2e	9	9	10
58: Ouachita-----	2w	9	9	10
59: Ozan-----	3w	6.5	6	---
60: Ozan-----	4w	6.5	6	---
61: Peanutrock-----	4e	5.5	4.5	6
62: Peanutrock-----	4e	5.5	4.5	6
63: Peanutrock-----	7e	5.5	4.5	6
64: Peanutrock-----	4e	5.5	4.5	6
Tiak-----	4e	5	4	4

Soil Survey of Pike County, Arkansas

Table 6.--Land Capability and Yields per Acre of Pasture--Continued

Map symbol and soil name	Land capability	Bahiagrass	Common bermudagrass	Improved bermudagrass
		AUM	AUM	AUM
65: Pikecity-----	3e	7.5	---	7.5
66: Pikecreek-----	7w	---	---	---
67: Pirum-----	3e	6	6	7
Sherless-----	2e	6	6	7
Bonnerdale-----	3e	7	7	8
68: Pits-----	7e	---	---	---
Udorthents-----	7e	---	---	---
69: Riverwash-----	7s	---	---	---
Ceda-----	7s	---	---	---
70: Sardis-----	2e	6	8	10
71: Sardis-----	2w	6	7	9
72: Sherless-----	4e	5	5	6
Littlefir-----	6e	5	5	6
73: Sherless-----	6e	5	5	6
Littlefir-----	6e	5	5	6
Nashoba-----	6s	---	---	---
74: Sherless-----	6s	---	---	---
Littlefir-----	6s	---	---	---
Nashoba-----	6s	---	---	---
75: Sherless-----	3e	---	6	7
Nashoba-----	4e	---	5.5	7
76: Smithton-----	3w	7.5	7	8
77: Speer-----	2w	8	8	9
78: Speer-----	2e	8	8	9
79: Stelltown-----	3e	8.5	---	10.5

Soil Survey of Pike County, Arkansas

Table 6.--Land Capability and Yields per Acre of Pasture--Continued

Map symbol and soil name	Land capability	Bahiagrass	Common bermudagrass	Improved bermudagrass
		AUM	AUM	AUM
80: Stelltown-----	4e	8.5	---	10.5
81: Tiak-----	4e	7.5	6.5	7.5
82: Tiak-----	4e	7.5	6.5	7.5
83: Tiak-----	6e	6	5.5	6.5
84: Tiak-----	4e	7.5	6.5	7.5
Antoine-----	3e	8	7	9
85: Tiak-----	6e	6	5.5	6.5
Antoine-----	6e	---	7	9
86: Toine-----	2e	8.5	7.5	9
87: Toine-----	2w	8.5	7.5	9
88: Una-----	3w	6.5	7.5	---
89: Vaughn-----	2w	---	6	8
90: Vaughn-----	5w	---	5	7
Pikecreek-----	7w	---	---	---
91: Water.				
92: Wetsaw-----	3e	6.5	6.5	7.5
93: Woodall-----	3w	7	7	8
94: Woodall-----	5w	7	7	8
95: Yanush-----	4e	4.5	4.5	5.5
96: Yanush-----	6e	4.5	4.5	5.5
97: Yanush-----	7e	---	---	---
Avant-----	7s	---	---	---
Bengal-----	7s	---	---	---

Soil Survey of Pike County, Arkansas

Table 6.--Land Capability and Yields per Acre of Pasture--Continued

Map symbol and soil name	Land capability	Bahiagrass	Common bermudagrass	Improved bermudagrass
		<i>AUM</i>	<i>AUM</i>	<i>AUM</i>
98:				
Yanush-----	7e	---	---	---
Avant-----	7s	---	---	---
Bengal-----	7e	---	---	---
99:				
Yanush-----	7s	---	---	---
Bigfork-----	7e	---	---	---
100:				
Yanush-----	7e	---	---	---
Bigfork-----	7e	---	---	---
101:				
Zafra-----	7s	---	---	---
Carnasaw-----	7e	---	---	---
Clebit-----	7s	---	---	---

Soil Survey of Pike County, Arkansas

Table 7.--Forestland Productivity

[Only the soils suitable for production of commercial trees are listed. Absence of an entry indicates that information was not available]

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
1: Antoine-----	Loblolly pine----- Shortleaf pine-----	90 80	131 130	Loblolly pine, shortleaf pine
2: Avilla-----	Black walnut----- Cherrybark oak----- Loblolly pine----- Shortleaf pine----- Southern red oak----- Sweetgum-----	--- --- 80 70 65 70	--- --- 110 110 43 57	Black walnut, cherrybark oak, loblolly pine, shortleaf pine
3: Avilla-----	Loblolly pine----- Shortleaf pine-----	80 70	110 110	---
4: Avilla-----	Black walnut----- Cherrybark oak----- Loblolly pine----- Shortleaf pine----- Southern red oak----- Sweetgum-----	--- --- 80 70 65 70	--- --- 110 110 43 57	Black walnut, cherrybark oak, loblolly pine, shortleaf pine
5: Bengal-----	Blackjack oak----- Post oak----- Shortleaf pine-----	--- --- 60	--- --- 88	Loblolly pine, shortleaf pine, southern red oak
Bismarck-----	Blackjack oak----- Eastern redcedar----- Loblolly pine----- Post oak----- Shortleaf pine-----	--- 30 5 --- 45	--- 29 72 --- 57	Loblolly pine, shortleaf pine
Yanush-----	Black walnut----- Shortleaf pine----- Southern red oak-----	--- 65 ---	--- 99 ---	Loblolly pine, shortleaf pine
6: Bengal-----	Blackjack oak----- Post oak----- Shortleaf pine-----	--- --- 60	--- --- 88	Loblolly pine, shortleaf pine, southern red oak
Bismarck-----	Blackjack oak----- Eastern redcedar----- Loblolly pine----- Post oak----- Shortleaf pine-----	--- 30 5 --- 45	--- 29 72 --- 57	Loblolly pine, shortleaf pine
Yanush-----	Shortleaf pine-----	65	99	---
7: Bengal-----	Shortleaf pine-----	52	72	---

Soil Survey of Pike County, Arkansas

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
7:				
Bismarck-----	Blackjack oak-----	---	---	Loblolly pine, shortleaf pine
	Eastern redcedar----	30	29	
	Loblolly pine-----	50	72	
	Post oak-----	---	---	
	Shortleaf pine-----	45	57	
Bigfork-----	Shortleaf pine-----	45	57	---
8:				
Bigfork-----	Blackjack oak-----	---	---	---
	Post oak-----	---	---	
	Shortleaf pine-----	45	57	
Rock outcrop.				
9:				
Bigfork-----	Shortleaf pine-----	45	57	---
Yanush-----	Shortleaf pine-----	60	88	---
Rock outcrop.				
10, 11:				
Billstown-----	Eastern redcedar----	45	57	Eastern redcedar, loblolly pine
	Loblolly pine-----	74	100	
	Shortleaf pine-----	66	100	
	Southern red oak----	70	57	
12:				
Billstown-----	Eastern redcedar----	45	57	Eastern redcedar, loblolly pine
	Loblolly pine-----	74	100	
	Shortleaf pine-----	66	100	
	Southern red oak----	70	57	
Tiak-----	Loblolly pine-----	80	110	Loblolly pine, shortleaf pine
	Shortleaf pine-----	70	110	
13:				
Bonnerdale-----	Loblolly pine-----	80	110	Loblolly pine, shortleaf pine
	Shortleaf pine-----	70	110	
	Sweetgum-----	80	86	
14:				
Carnasaw-----	Loblolly pine-----	---	114	Loblolly pine, shortleaf pine
	Shortleaf pine-----	60	88	
Pirum-----	Loblolly pine-----	80	114	Loblolly pine, shortleaf pine, southern red oak
	Shortleaf pine-----	65	99	
	Southern red oak----	70	57	
	White oak-----	70	57	
15:				
Carnasaw-----	Loblolly pine-----	75	101	Loblolly pine, shortleaf pine
	Shortleaf pine-----	65	101	

Soil Survey of Pike County, Arkansas

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
15: Sherless-----	Blackgum----- Hickory----- Loblolly pine----- Shortleaf pine----- Southern red oak----- Sweetgum----- White oak-----	--- --- 75 65 --- --- ---	--- --- 101 101 --- --- ---	Loblolly pine, shortleaf pine
16: Carnasaw-----	Loblolly pine----- Shortleaf pine-----	75 65	101 101	Loblolly pine, shortleaf pine
Sherless-----	Loblolly pine----- Shortleaf pine-----	75 65	101 101	---
17: Carnasaw-----	Loblolly pine----- Shortleaf pine-----	70 60	86 88	Loblolly pine, shortleaf pine
Sherwood-----	Post oak----- Shortleaf pine-----	--- 60	--- 88	Loblolly pine, shortleaf pine
Zafra-----	Hickory----- Shortleaf pine----- Southern red oak----- White oak-----	--- 60 --- ---	--- 88 --- ---	Loblolly pine, shortleaf pine
18: Carnasaw-----	Loblolly pine----- Shortleaf pine-----	80 60	--- 88	Loblolly pine, shortleaf pine
Zafra-----	Shortleaf pine----- Southern red oak-----	65 70	99 ---	Loblolly pine, shortleaf pine
Clebit-----	Blackjack oak----- Eastern redcedar----- Post oak----- Shortleaf pine----- Winged elm-----	--- 30 --- 41 ---	--- --- --- 48 ---	---
19: Ceda-----	American sycamore----- Shortleaf pine----- Southern red oak----- Sweetgum----- White oak-----	80 65 --- 80 ---	--- 99 --- 86 ---	American sycamore, loblolly pine, shortleaf pine, sweetgum
20: Ceda-----	American sycamore----- Shortleaf pine----- Southern red oak----- Sweetgum----- White oak-----	80 70 --- 80 ---	86 110 --- 86 ---	American sycamore, loblolly pine, shortleaf pine, sweetgum
21: Clebit-----	Shortleaf pine-----	41	48	---
Carnasaw-----	Shortleaf pine----- Southern red oak-----	60 ---	88 ---	Loblolly pine, shortleaf pine

Soil Survey of Pike County, Arkansas

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
21: Pirum-----	Shortleaf pine----- Southern red oak----- White oak-----	60 60 60	88 43 43	Loblolly pine, shortleaf pine, southern red oak
22: Cupco-----	Green ash----- Loblolly pine----- Shortleaf pine----- Water oak----- Willow oak-----	--- 90 80 80 ---	--- 131 130 72 ---	Loblolly pine, shortleaf pine
24, 25: Dela-----	Eastern cottonwood-- Green ash----- Hickory----- Loblolly pine----- Shortleaf pine----- Southern red oak----- Sweetgum-----	100 --- --- 95 85 80 90	129 --- --- 142 140 57 100	Black walnut, loblolly pine, shortleaf pine, southern red oak
26: Delight-----	Eastern redcedar----	40	43	Eastern redcedar
27: Gurdon-----	Loblolly pine----- Shortleaf pine----- Shumard's oak----- Sweetgum----- Willow oak-----	90 80 --- 90 ---	131 130 --- --- ---	Cherrybark oak, loblolly pine, Shumard's oak, sweetgum
28, 29: Guyton-----	Green ash----- Loblolly pine----- Shortleaf pine----- Southern red oak----- Sweetgum----- Water oak-----	--- 80 70 --- --- ---	--- 110 110 --- --- ---	Loblolly pine, sweetgum
30: Guyton-----	Loblolly pine----- Shortleaf pine-----	80 70	110 110	---
31: Japany-----	Cherrybark oak----- Loblolly pine----- Shortleaf pine----- Shumard's oak----- Sweetgum----- Water oak----- White oak-----	90 90 80 85 90 80 80	114 131 130 72 100 72 57	Cherrybark oak, loblolly pine, Shumard's oak, sweetgum
32, 33: Kenn-----	Loblolly pine----- Post oak----- Shortleaf pine----- Southern red oak----- Sweetgum-----	80 --- 70 70 80	110 --- 110 57 86	Loblolly pine, shortleaf pine

Soil Survey of Pike County, Arkansas

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
34: Kenn-----	Loblolly pine----- Post oak----- Shortleaf pine----- Southern red oak---- Sweetgum-----	90 --- 80 70 80	131 --- 130 57 86	Loblolly pine, shortleaf pine
35: Kenn-----	Loblolly pine----- Post oak----- Shortleaf pine----- Southern red oak---- Sweetgum-----	80 --- 70 70 80	110 --- 110 57 86	Loblolly pine, shortleaf pine
Ceda-----	American sycamore--- Shortleaf pine----- Southern red oak---- Sweetgum----- White oak-----	80 65 --- 80 ---	--- 99 --- 86 ---	American sycamore, loblolly pine, shortleaf pine, sweetgum
36: Kizzia-----	Loblolly pine----- Shortleaf pine----- Sweetgum-----	80 70 80	110 110 ---	Loblolly pine
37: Leeper-----	American sycamore--- Eastern cottonwood-- Green ash----- Loblolly pine----- Shortleaf pine----- Sweetgum-----	100 110 90 90 80 95	129 157 57 131 130 114	American sycamore, eastern cottonwood, green ash, sweetgum
38: Littlefir-----	Blackjack oak----- Loblolly pine----- Post oak----- Shortleaf pine-----	--- 75 --- 65	--- 101 --- 101	Loblolly pine, shortleaf pine, southern red oak
Carnasaw-----	Blackjack oak----- Eastern redcedar---- Loblolly pine----- Post oak----- Shortleaf pine-----	--- 30 75 --- 65	--- 29 101 --- 101	Loblolly pine, shortleaf pine
39: Magnet.				
40: Marietta-----	American sycamore--- Eastern cottonwood-- Green ash----- Sweetgum-----	105 105 90 100	--- 143 --- ---	American sycamore, eastern cottonwood, green ash, sweetgum
41, 42: Mazarn-----	Loblolly pine----- Shortleaf pine----- Sweetgum----- White oak-----	75 65 65 60	101 99 57 43	Loblolly pine, shortleaf pine

Soil Survey of Pike County, Arkansas

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
43: McCaskill-----	Cherrybark oak-----	85	100	Loblolly pine, slash pine, sweetgum
	Loblolly pine-----	90	131	
	Shortleaf pine-----	80	130	
	Sweetgum-----	85	86	
	Water oak-----	80	72	
44, 45, 46: Mena-----	Loblolly pine-----	80	110	Loblolly pine, shortleaf pine
	Shortleaf pine-----	70	110	
47: Murfreesboro-----	Black walnut-----	---	---	---
	Cherrybark oak-----	---	---	
	Loblolly pine-----	80	110	
	Shortleaf pine-----	70	110	
	Southern red oak----	65	43	
	Sweetgum-----	70	57	
48: Murfreesboro-----	Black walnut-----	---	---	Black walnut, cherrybark oak, loblolly pine, shortleaf pine
	Cherrybark oak-----	---	---	
	Loblolly pine-----	80	110	
	Shortleaf pine-----	70	110	
	Southern red oak----	65	43	
	Sweetgum-----	70	57	
49: Nathan-----	Loblolly pine-----	80	110	---
	Shortleaf pine-----	70	110	
50: Nashoba-----	Post oak-----	---	---	Loblolly pine, shortleaf pine
	Shortleaf pine-----	60	88	
Bismarck-----	Blackjack oak-----	---	---	Loblolly pine, shortleaf pine
	Eastern redcedar----	30	29	
	Loblolly pine-----	---	72	
	Post oak-----	---	---	
	Shortleaf pine-----	45	57	
Littlefir-----	Shortleaf pine-----	60	88	---
51: Nashoba-----	Blackjack oak-----	---	---	Loblolly pine, shortleaf pine
	Eastern redcedar----	30	29	
	Loblolly pine-----	5	72	
	Post oak-----	---	---	
	Shortleaf pine-----	60	88	
Bismarck-----	Post oak-----	---	---	Loblolly pine, shortleaf pine
	Shortleaf pine-----	45	57	
Littlefir-----	Blackgum-----	---	---	Loblolly pine, shortleaf pine
	Hickory-----	---	---	
	Shortleaf pine-----	60	88	
	Southern red oak----	---	---	
	Sweetgum-----	---	---	
	White oak-----	---	---	

Soil Survey of Pike County, Arkansas

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
52:				
Nashoba-----	Post oak-----	---	---	Loblolly pine, shortleaf pine
	Shortleaf pine-----	60	88	
Littlefir-----	Loblolly pine-----	75	101	---
	Shortleaf pine-----	65	101	
Sherless-----	Hickory-----	---	---	Loblolly pine, shortleaf pine
	Shortleaf pine-----	65	99	
	Southern red oak----	---	---	
	Sweetgum-----	---	---	
	White oak-----	---	---	
53:				
Neff-----	Green ash-----	---	---	Eastern cottonwood, green ash,
	Loblolly pine-----	90	131	loblolly pine,
	Shortleaf pine-----	80	130	shortleaf pine,
	Sweetgum-----	80	86	sweetgum
	Water oak-----	80	---	
	Willow oak-----	80	---	
54, 55, 56:				
Ochlockonee-----	Eastern cottonwood--	100	129	Eastern cottonwood,
	Loblolly pine-----	100	154	loblolly pine,
	Shortleaf pine-----	90	150	tuliptree
	Sweetgum-----	90	100	
	Tuliptree-----	110	129	
	Water oak-----	80	72	
57, 58:				
Ouachita-----	Cherrybark oak-----	100	143	Cherrybark oak,
	Eastern cottonwood--	100	129	eastern cottonwood,
	Loblolly pine-----	100	154	loblolly pine,
	Shortleaf pine-----	90	150	Nuttall oak,
	Sweetgum-----	100	143	shortleaf pine
59, 60:				
Ozan-----	Cherrybark oak-----	---	---	American sycamore,
	Eastern cottonwood--	---	---	eastern
	Loblolly pine-----	95	142	cottonwood,
	Shortleaf pine-----	85	140	loblolly pine,
	Shumard's oak-----	---	---	Shumard's oak,
	Sweetgum-----	90	---	sweetgum
	Water oak-----	90	---	
61:				
Peanutrock-----	Loblolly pine-----	68	90	Loblolly pine,
	Shortleaf pine-----	60	88	shortleaf pine
	White oak-----	---	---	
62:				
Peanutrock-----	Loblolly pine-----	68	90	---
	Shortleaf pine-----	60	88	
63:				
Peanutrock-----	Loblolly pine-----	68	90	Loblolly pine,
	Shortleaf pine-----	60	88	shortleaf pine
	White oak-----	---	---	

Soil Survey of Pike County, Arkansas

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
64: Peanutrock-----	Loblolly pine----- Shortleaf pine-----	68 60	90 88	---
Tiak-----	Loblolly pine----- Shortleaf pine----- White oak-----	80 70 ---	110 110 ---	Loblolly pine, shortleaf pine
65: Pikecity-----	Loblolly pine----- Shortleaf pine----- Virginia pine-----	80 70 70	110 110 114	Loblolly pine
66: Pikecreek-----	American sycamore--- Shortleaf pine----- Southern red oak--- Sweetgum----- White oak-----	80 65 --- 80 ---	--- 99 --- 86 ---	American sycamore, loblolly pine, shortleaf pine, sweetgum
67: Pirum-----	Loblolly pine----- Shortleaf pine-----	80 70	110 110	---
Sherless-----	Loblolly pine----- Shortleaf pine----- Sweetgum-----	75 65 80	101 101 86	Loblolly pine, shortleaf pine
Bonnerdale-----	Loblolly pine----- Shortleaf pine----- Sweetgum-----	80 70 80	110 110 86	Loblolly pine, shortleaf pine
69: Riverwash.				
Ceda-----	American sycamore--- Shortleaf pine----- Southern red oak--- Sweetgum----- White oak-----	80 65 --- 80 ---	--- 99 --- 86 ---	American sycamore, loblolly pine, shortleaf pine, sweetgum
70: Sardis-----	Cherrybark oak----- Loblolly pine----- Shortleaf pine----- Sweetgum----- Water oak-----	95 95 85 100 96	129 142 140 143 100	Cherrybark oak, loblolly pine, shortleaf pine, sweetgum
71: Sardis-----	Cherrybark oak----- Loblolly pine----- Shortleaf pine----- Sweetgum----- Water oak-----	95 95 85 100 96	129 142 140 143 100	Cherrybark oak, loblolly pine, shortleaf pine, sweetgum

Soil Survey of Pike County, Arkansas

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
72: Sherless-----	Blackgum----- Hickory----- Loblolly pine----- Shortleaf pine----- Southern red oak----- Sweetgum----- White oak-----	--- --- 75 65 --- --- ---	--- --- 101 101 --- --- ---	Loblolly pine, shortleaf pine
Littlefir-----	Blackjack oak----- Loblolly pine----- Post oak----- Shortleaf pine-----	--- 75 --- 65	--- 101 --- 101	---
73: Sherless-----	Blackgum----- Hickory----- Loblolly pine----- Shortleaf pine----- Southern red oak----- Sweetgum----- White oak-----	--- --- 75 65 --- --- ---	--- --- 101 101 --- --- ---	Loblolly pine, shortleaf pine
Littlefir-----	Blackjack oak----- Loblolly pine----- Post oak----- Shortleaf pine-----	--- 75 --- 65	--- 101 --- 101	---
Nashoba-----	Shortleaf pine-----	60	88	---
74: Sherless-----	Loblolly pine----- Shortleaf pine-----	75 65	101 101	---
Littlefir-----	Loblolly pine----- Shortleaf pine-----	75 65	101 101	---
Nashoba-----	Shortleaf pine-----	60	88	---
75: Sherless-----	Blackgum----- Hickory----- Shortleaf pine----- Southern red oak----- Sweetgum----- White oak-----	--- --- 65 --- --- ---	--- --- 99 --- --- ---	Loblolly pine, shortleaf pine
Nashoba-----	Post oak----- Shortleaf pine-----	--- 60	--- 88	Loblolly pine, shortleaf pine
76: Smithton-----	Cherrybark oak----- Loblolly pine----- Shortleaf pine----- Sweetgum----- Water oak-----	85 90 80 86 85	100 131 130 100 86	Cherrybark oak, loblolly pine, shortleaf pine, Shumard's oak

Soil Survey of Pike County, Arkansas

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
77: Speer-----	Loblolly pine----- Shortleaf pine----- Southern red oak---- Sweetgum-----	95 85 80 90	142 140 57 100	Black walnut, loblolly pine, shortleaf pine, southern red oak
78: Speer-----	Loblolly pine----- Shortleaf pine----- Southern red oak---- Sweetgum-----	95 85 80 90	142 140 57 100	Black walnut, loblolly pine, shortleaf pine, southern red oak
79: Stelltown-----	Loblolly pine----- Shortleaf pine----- Sweetgum-----	90 80 75	131 130 72	Loblolly pine, slash pine
80: Stelltown-----	Loblolly pine----- Shortleaf pine----- Sweetgum-----	90 80 75	131 130 72	Loblolly pine, slash pine
81, 82, 83: Tiak-----	Loblolly pine----- Shortleaf pine-----	80 70	110 110	Loblolly pine, shortleaf pine
84: Tiak-----	Loblolly pine----- Shortleaf pine-----	80 70	110 110	Loblolly pine, shortleaf pine
Antoine-----	Hickory----- Loblolly pine----- Post oak----- Shortleaf pine----- Southern red oak---- Sweetgum-----	--- 80 --- 70 --- ---	--- 110 --- 110 --- ---	Loblolly pine
85: Tiak-----	Loblolly pine----- Shortleaf pine-----	80 70	110 110	Loblolly pine, shortleaf pine
Antoine-----	Loblolly pine----- Shortleaf pine-----	80 70	110 110	Loblolly pine
86, 87: Toine-----	Cherrybark oak----- Loblolly pine----- Nuttall oak----- Shortleaf pine----- Sweetgum-----	80 95 85 85 90	86 142 86 140 100	Cherrybark oak, loblolly pine, Nuttall oak, shortleaf pine, willow oak

Soil Survey of Pike County, Arkansas

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
88: Una-----	Cherrybark oak-----	90	114	Green ash, Nuttall oak, sweetgum, water tupelo
	Eastern cottonwood--	85	86	
	Green ash-----	75	43	
	Loblolly pine-----	90	131	
	Nuttall oak-----	95	---	
	Shortleaf pine-----	80	130	
	Sweetgum-----	90	100	
	Water oak-----	90	86	
	Water tupelo-----	80	114	
	Willow oak-----	90	86	
89: Vaughn-----	Loblolly pine-----	80	110	Loblolly pine, shortleaf pine
	Post oak-----	---	---	
	Shortleaf pine-----	70	110	
	Southern red oak----	70	57	
	Sweetgum-----	80	86	
90: Vaughn-----	Loblolly pine-----	80	110	Loblolly pine, shortleaf pine
	Post oak-----	---	---	
	Shortleaf pine-----	70	110	
	Southern red oak----	70	57	
	Sweetgum-----	80	86	
Pikecreek-----	American sycamore----	80	---	American sycamore, loblolly pine, shortleaf pine, sweetgum
	Shortleaf pine-----	65	99	
	Southern red oak----	---	---	
	Sweetgum-----	80	86	
	White oak-----	---	---	
92: Wetsaw-----	Blackgum-----	---	---	Loblolly pine, shortleaf pine
	Hickory-----	---	---	
	Loblolly pine-----	80	110	
	Shortleaf pine-----	70	110	
	Southern red oak----	---	---	
	Sweetgum-----	---	---	
	White oak-----	---	---	
93, 94: Woodall-----	Cherrybark oak-----	90	---	Cherrybark oak, loblolly pine, Shumard's oak, sweetgum
	Loblolly pine-----	90	131	
	Shortleaf pine-----	80	130	
	Sweetgum-----	90	---	
	Water oak-----	90	---	
95, 96: Yanush-----	Black walnut-----	---	---	Loblolly pine, shortleaf pine
	Shortleaf pine-----	65	99	
	Southern red oak----	---	---	
97: Yanush-----	Black walnut-----	---	---	---
	Shortleaf pine-----	65	99	
	Southern red oak----	---	---	
Avant-----	Shortleaf pine-----	60	88	---

Soil Survey of Pike County, Arkansas

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber <i>cu ft/ac</i>	
97: Bengal-----	Blackjack oak----- Hickory----- Post oak----- Shortleaf pine----- Southern red oak----- White oak-----	--- --- --- 60 --- ---	--- --- --- 88 --- ---	Loblolly pine, shortleaf pine
98: Yanush-----	Black walnut----- Shortleaf pine----- Southern red oak-----	--- 65 ---	--- 99 ---	---
Avant-----	Shortleaf pine-----	60	88	---
Bengal-----	Shortleaf pine-----	60	88	---
99: Yanush-----	Shortleaf pine-----	65	99	---
Bigfork-----	Blackjack oak----- Post oak----- Shortleaf pine-----	--- --- 45	--- --- 57	---
100: Yanush-----	Black walnut----- Shortleaf pine----- Southern red oak-----	--- 65 ---	--- 99 ---	---
Bigfork-----	Blackjack oak----- Post oak----- Shortleaf pine-----	--- --- 45	--- --- 57	---
101: Zafra-----	Shortleaf pine----- Southern red oak-----	60 70	88 ---	Loblolly pine, shortleaf pine
Carnasaw-----	Loblolly pine----- Shortleaf pine-----	80 60	--- 88	Loblolly pine, shortleaf pine
Clebit-----	Blackjack oak----- Eastern redcedar----- Post oak----- Shortleaf pine----- Winged elm-----	--- 30 --- 41 ---	--- --- --- 48 ---	---

Soil Survey of Pike County, Arkansas

Table 8a.--Forestland Management (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landing		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Moderate Low strength	0.50	Moderately suited Low strength	0.50	Severe Low strength	1.00
2, 3: Avilla-----	90	Slight		Moderately suited Low strength	0.50	Severe Low strength	1.00
4: Avilla-----	100	Slight		Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
5: Bengal-----	50	Moderate Stoniness Low strength	0.50 0.50	Moderately suited Slope Rock fragments Low strength	0.50 0.50 0.50	Severe Low strength	1.00
Bismarck-----	20	Moderate Stoniness Low strength	0.50 0.50	Moderately suited Slope Rock fragments Low strength	0.50 0.50 0.50	Moderate Low strength	0.50
Yanush-----	20	Moderate Stoniness Low strength	0.50 0.50	Moderately suited Slope Rock fragments Low strength	0.50 0.50 0.50	Severe Low strength	1.00
6: Bengal-----	50	Moderate Slope Stoniness	0.50 0.50	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50	Severe Low strength	1.00
Bismarck-----	20	Moderate Slope Stoniness	0.50 0.50	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50	Moderate Low strength	0.50
Yanush-----	20	Moderate Slope Stoniness	0.50 0.50	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50	Severe Low strength	1.00
7: Bengal-----	55	Severe Slope Stoniness Low strength	1.00 0.50 0.50	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50	Moderate Low strength	0.50
Bismarck-----	25	Severe Slope Stoniness	1.00 0.50	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50	Moderate Low strength	0.50

Soil Survey of Pike County, Arkansas

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landing		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7: Bigfork-----	20	Severe Slope Stoniness Low strength	1.00 1.00 0.50	Poorly suited Slope Rock fragments Low strength	1.00 1.00 0.50	Moderate Low strength	0.50
8: Bigfork-----	65	Severe Stoniness Restrictive layer	1.00 0.50	Poorly suited Rock fragments Slope Low strength	1.00 1.00 0.50	Moderate Low strength	0.50
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9: Bigfork-----	45	Severe Slope Stoniness Low strength	1.00 1.00 0.50	Poorly suited Rock fragments Slope Low strength	1.00 1.00 0.50	Moderate Low strength	0.50
Yanush-----	30	Severe Slope Stoniness Low strength	1.00 1.00 0.50	Poorly suited Rock fragments Slope Low strength	1.00 1.00 0.50	Moderate Low strength	0.50
Rock outcrop-----	15	Not rated		Not rated		Not rated	
10: Billstown-----	85	Moderate Stickiness/slope Low strength	0.50 0.50	Moderately suited Low strength Slope	0.50 0.50	Severe Low strength	1.00
11: Billstown-----	90	Moderate Stickiness/slope Low strength	0.50 0.50	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
12: Billstown-----	50	Moderate Stickiness/slope Low strength	0.50 0.50	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
Tiak-----	40	Moderate Stickiness/slope Low strength	0.50 0.50	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
13: Bonnerdale-----	95	Moderate Low strength	0.50	Poorly suited Wetness Low strength Slope	1.00 0.50 0.50	Severe Low strength	1.00
14: Carnasaw-----	70	Severe Stoniness	1.00	Poorly suited Rock fragments Slope	1.00 0.50	Slight Strength	0.10

Soil Survey of Pike County, Arkansas

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landing		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
14: Pirum-----	20	Severe Stoniness Restrictive layer	1.00 0.50	Poorly suited Rock fragments Slope Low strength	1.00 0.50 0.50	Moderate Low strength	0.50
15: Carnasaw-----	55	Slight		Moderately suited Slope	0.50	Slight Strength	0.10
Sherless-----	35	Slight		Moderately suited Slope	0.50	Slight Strength	0.10
16: Carnasaw-----	60	Moderate Slope Stoniness	0.50 0.50	Poorly suited Slope Rock fragments	1.00 0.50	Slight Strength	0.10
Sherless-----	35	Moderate Slope Stoniness	0.50 0.50	Poorly suited Slope Rock fragments	1.00 0.50	Slight Strength	0.10
17: Carnasaw-----	50	Severe Slope Stoniness Low strength	1.00 0.50 0.50	Poorly suited Slope Rock fragments	1.00 0.50	Slight Strength	0.10
Sherwood-----	25	Severe Slope Stoniness Low strength	1.00 0.50 0.50	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50	Severe Low strength	1.00
Zafra-----	15	Severe Slope Stoniness Low strength	1.00 1.00 0.50	Poorly suited Slope Rock fragments	1.00 1.00	Slight Strength	0.10
18: Carnasaw-----	50	Severe Stoniness Slope	1.00 0.50	Poorly suited Slope Rock fragments	1.00 1.00	Slight Strength	0.10
Zafra-----	25	Severe Stoniness Slope	1.00 0.50	Poorly suited Slope Rock fragments	1.00 1.00	Slight Strength	0.10
Clebit-----	15	Severe Stoniness Restrictive layer Slope	1.00 1.00 0.50	Poorly suited Slope Rock fragments	1.00 1.00	Slight Strength	0.10
19: Ceda-----	90	Severe Flooding Sandiness	1.00 0.50	Poorly suited Flooding	1.00	Slight Strength	0.10

Soil Survey of Pike County, Arkansas

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landing		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
20: Ceda-----	100	Severe Flooding Sandiness	1.00 0.50	Poorly suited Flooding	1.00	Slight Strength	0.10
21: Clebit-----	40	Severe Stoniness Restrictive layer	1.00 1.00	Poorly suited Rock fragments Slope	1.00 0.50	Slight Strength	0.10
Carnasaw-----	35	Severe Stoniness	1.00	Poorly suited Rock fragments Slope	1.00 0.50	Slight Strength	0.10
Pirum-----	15	Severe Stoniness Restrictive layer	1.00 0.50	Poorly suited Rock fragments Slope Low strength	1.00 0.50 0.50	Moderate Low strength	0.50
22: Cupco-----	90	Moderate Low strength	0.50	Moderately suited Wetness Low strength	0.50 0.50	Severe Low strength	1.00
23: Dam-----	100	Not rated		Not rated		Not rated	
24: Dela-----	95	Severe Flooding	1.00	Poorly suited Flooding	1.00	Moderate Low strength	0.50
25: Dela-----	90	Severe Flooding	1.00	Poorly suited Flooding	1.00	Moderate Low strength	0.50
26: Delight-----	100	Slight		Moderately suited Low strength Slope Stickiness; high plasticity index	0.50 0.50 0.50	Severe Low strength	1.00
27: Gurdon-----	90	Moderate Flooding	0.50	Moderately suited Flooding Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
28: Guyton-----	100	Moderate Low strength	0.50	Poorly suited Wetness Low strength	1.00 0.50	Severe Low strength	1.00
29: Guyton-----	100	Severe Flooding Low strength	1.00 0.50	Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50	Severe Low strength	1.00

Soil Survey of Pike County, Arkansas

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landing		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
30: Guyton-----	100	Severe Wetness Low strength	1.00 0.50	Poorly suited Ponding Wetness Low strength	1.00 1.00 0.50	Severe Low strength Wetness	1.00 0.50
31: Japany-----	90	Moderate Low strength Stickiness/slope	0.50 0.50	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
32: Kenn-----	95	Slight		Well suited		Moderate Low strength	0.50
33: Kenn-----	90	Moderate Flooding	0.50	Moderately suited Flooding	0.50	Moderate Low strength	0.50
34: Kenn-----	90	Severe Flooding	1.00	Poorly suited Flooding	1.00	Moderate Low strength	0.50
35: Kenn-----	55	Severe Flooding	1.00	Poorly suited Flooding	1.00	Moderate Low strength	0.50
Ceda-----	35	Severe Flooding Sandiness	1.00 0.50	Poorly suited Flooding	1.00	Slight Strength	0.10
36: Kizzia-----	90	Slight		Moderately suited Low strength	0.50	Severe Low strength	1.00
37: Leeper-----	95	Moderate Flooding Low strength	0.50 0.50	Moderately suited Flooding Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00
38: Littlefir-----	60	Moderate Low strength	0.50	Moderately suited Low strength	0.50	Severe Low strength	1.00
Carnasaw-----	30	Moderate Low strength	0.50	Moderately suited Low strength	0.50	Severe Low strength	1.00
39: Magnet-----	100	Moderate Slope	0.50	Poorly suited Slope	1.00	Moderate Low strength	0.50
40: Marietta-----	95	Moderate Flooding Low strength	0.50 0.50	Moderately suited Flooding Low strength Wetness	0.50 0.50 0.50	Severe Low strength	1.00

Soil Survey of Pike County, Arkansas

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landing		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
41: Mazarn-----	100	Moderate Low strength	0.50	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
42: Mazarn-----	90	Severe Flooding Low strength	1.00 0.50	Poorly suited Flooding Low strength Wetness	1.00 0.50 0.50	Severe Low strength	1.00
43: McCaskill-----	95	Moderate Low strength	0.50	Moderately suited Low strength Wetness	0.50 0.50	Severe Low strength	1.00
44: Mena-----	95	Moderate Low strength Stickiness/slope	0.50 0.50	Moderately suited Low strength	0.50	Severe Low strength	1.00
45: Mena-----	95	Moderate Low strength Stickiness/slope	0.50 0.50	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00
46: Mena-----	95	Moderate Low strength Stickiness/slope	0.50 0.50	Moderately suited Low strength	0.50	Severe Low strength	1.00
47, 48: Murfreesboro-----	90	Moderate Low strength	0.50	Moderately suited Low strength	0.50	Severe Low strength	1.00
49: Nathan-----	90	Moderate Low strength	0.50	Moderately suited Low strength	0.50	Severe Low strength	1.00
50: Nashoba-----	50	Moderate Restrictive layer	0.50	Well suited		Moderate Low strength	0.50
Bismarck-----	25	Slight		Well suited		Moderate Low strength	0.50
Littlefir-----	20	Moderate Low strength	0.50	Moderately suited Low strength	0.50	Severe Low strength	1.00
51: Nashoba-----	50	Moderate Restrictive layer	0.50	Moderately suited Slope	0.50	Slight Strength	0.10
Bismarck-----	25	Moderate Low strength	0.50	Moderately suited Slope Low strength	0.50 0.50	Moderate Low strength	0.50
Littlefir-----	20	Moderate Low strength	0.50	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00

Soil Survey of Pike County, Arkansas

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landing		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
52: Nashoba-----	50	Severe Stoniness Restrictive layer Slope	1.00 1.00 0.50	Poorly suited Slope Rock fragments	1.00 1.00	Slight Strength	0.10
Littlefir-----	25	Severe Stoniness Slope	1.00 0.50	Poorly suited Slope Rock fragments	1.00 1.00	Slight Strength	0.10
Sherless-----	15	Moderate Slope Stoniness	0.50 0.50	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50	Moderate Low strength	0.50
53: Neff-----	95	Moderate Flooding Low strength	0.50 0.50	Moderately suited Wetness Flooding Low strength	0.50 0.50 0.50	Severe Low strength	1.00
54: Ochlockonee-----	95	Slight		Well suited		Moderate Low strength	0.50
55: Ochlockonee-----	95	Moderate Flooding	0.50	Moderately suited Flooding	0.50	Moderate Low strength	0.50
56: Ochlockonee-----	95	Severe Flooding	1.00	Poorly suited Flooding	1.00	Moderate Low strength	0.50
57: Ouachita-----	95	Moderate Low strength	0.50	Moderately suited Low strength	0.50	Severe Low strength	1.00
58: Ouachita-----	95	Severe Flooding Low strength	1.00 0.50	Poorly suited Flooding Low strength	1.00 0.50	Severe Low strength	1.00
59: Ozan-----	100	Slight		Moderately suited Wetness	0.50	Moderate Low strength	0.50
60: Ozan-----	100	Moderate Flooding	0.50	Moderately suited Flooding Wetness	0.50 0.50	Moderate Low strength	0.50
61, 62: Peanutrock-----	95	Slight		Moderately suited Slope	0.50	Moderate Low strength	0.50
63: Peanutrock-----	90	Moderate Slope	0.50	Poorly suited Slope	1.00	Moderate Low strength	0.50

Soil Survey of Pike County, Arkansas

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landing	Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features
64: Peanutrock-----	55	Slight		Moderately suited Slope	0.50	Moderate Low strength
Tiak-----	35	Moderate Stickiness/slope Low strength	0.50 0.50	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength
65: Pikecity-----	90	Moderate Sandiness	0.50	Well suited		Moderate Low strength
66: Pikecreek-----	100	Severe Flooding	1.00	Poorly suited Flooding Sandiness	1.00 0.50	Moderate Low strength
67: Pirum-----	50	Moderate Restrictive layer	0.50	Moderately suited Low strength	0.50	Severe Low strength
Sherless-----	30	Slight		Poorly suited Wetness Low strength Slope	1.00 0.50 0.50	Severe Low strength
Bonnerdale-----	20	Moderate Low strength	0.50	Poorly suited Wetness Low strength	1.00 0.50	Severe Low strength
68: Pits-----	60	Not rated		Not rated		Not rated
Udorthents-----	40	Not rated		Not rated		Not rated
69: Riverwash-----	60	Not rated		Not rated		Not rated
Ceda-----	35	Severe Flooding Sandiness	1.00 0.50	Poorly suited Flooding	1.00	Slight Strength
70: Sardis-----	90	Moderate Low strength	0.50	Moderately suited Low strength	0.50	Severe Low strength
71: Sardis-----	90	Moderate Flooding Low strength	0.50 0.50	Moderately suited Flooding Low strength	0.50 0.50	Severe Low strength
72: Sherless-----	50	Slight		Moderately suited Low strength	0.50	Severe Low strength
Littlefir-----	40	Slight		Well suited		Moderate Low strength

Soil Survey of Pike County, Arkansas

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landing		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
73: Sherless-----	50	Slight		Moderately suited Slope	0.50	Slight Strength	0.10
Littlefir-----	25	Slight		Moderately suited Slope	0.50	Slight Strength	0.10
Nashoba-----	15	Moderate Restrictive layer	0.50	Moderately suited Slope	0.50	Slight Strength	0.10
74: Sherless-----	45	Moderate Slope	0.50	Poorly suited Slope	1.00	Slight Strength	0.10
Littlefir-----	30	Moderate Slope	0.50	Poorly suited Slope	1.00	Moderate Low strength	0.50
Nashoba-----	15	Severe Restrictive layer Slope	1.00 0.50	Poorly suited Slope	1.00	Slight Strength	0.10
75: Sherless-----	60	Slight		Well suited		Slight Strength	0.10
Nashoba-----	30	Severe Stoniness Restrictive layer	1.00 0.50	Poorly suited Rock fragments	1.00	Slight Strength	0.10
76: Smithton-----	100	Slight		Poorly suited Wetness Low strength	1.00 0.50	Severe Low strength	1.00
77: Speer-----	95	Moderate Flooding	0.50	Moderately suited Flooding	0.50	Moderate Low strength	0.50
78: Speer-----	95	Slight		Well suited		Moderate Low strength	0.50
79: Stelltown-----	90	Slight		Well suited		Moderate Low strength	0.50
80: Stelltown-----	90	Slight		Moderately suited Slope	0.50	Moderate Low strength	0.50
81, 82: Tiak-----	100	Moderate Low strength Stickiness/slope	0.50 0.50	Moderately suited Low strength	0.50	Severe Low strength	1.00
83: Tiak-----	100	Moderate Stickiness/slope Low strength	0.50 0.50	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength	1.00

Soil Survey of Pike County, Arkansas

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landing	Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features
84: Tiak-----	60	Moderate Low strength Stickiness/slope	0.50 0.50	Moderately suited Low strength	0.50	Severe Low strength
Antoine-----	40	Moderate Low strength	0.50	Moderately suited Low strength	0.50	Severe Low strength
85: Tiak-----	50	Moderate Stickiness/slope Low strength	0.50 0.50	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength
Antoine-----	40	Moderate Low strength	0.50	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength
86: Toine-----	95	Slight		Well suited		Moderate Low strength
87: Toine-----	95	Moderate Flooding	0.50	Moderately suited Flooding	0.50	Moderate Low strength
88: Una-----	100	Moderate Flooding Low strength Stickiness/slope	0.50 0.50 0.50	Poorly suited Wetness Flooding Low strength	1.00 0.50 0.50	Severe Low strength
89: Vaughn-----	90	Moderate Flooding	0.50	Moderately suited Flooding	0.50	Moderate Low strength
90: Vaughn-----	55	Severe Flooding	1.00	Poorly suited Flooding	1.00	Moderate Low strength
Pikecreek-----	35	Severe Flooding	1.00	Poorly suited Flooding Sandiness	1.00 0.50	Moderate Low strength
91: Water-----	100	Not rated		Not rated		Not rated
92: Wetsaw-----	100	Moderate Low strength	0.50	Well suited		Moderate Low strength
93: Woodall-----	100	Severe Flooding	1.00	Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50	Severe Low strength

Soil Survey of Pike County, Arkansas

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landing	Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features
94: Woodall-----	95	Moderate Flooding	0.50	Poorly suited Wetness Flooding Low strength	1.00 0.50 0.50	Severe Low strength
95: Yanush-----	90	Moderate Low strength	0.50	Moderately suited Low strength	0.50	Severe Low strength
96: Yanush-----	90	Moderate Low strength	0.50	Moderately suited Slope Low strength	0.50 0.50	Severe Low strength
97: Yanush-----	50	Moderate Slope	0.50	Poorly suited Slope Low strength	1.00 0.50	Moderate Low strength
Avant-----	35	Moderate Slope	0.50	Poorly suited Slope	1.00	Slight Strength
Bengal-----	15	Moderate Slope	0.50	Poorly suited Slope Low strength	1.00 0.50	Moderate Low strength
98: Yanush-----	50	Severe Slope Low strength	1.00 0.50	Poorly suited Slope Low strength	1.00 0.50	Severe Low strength
Avant-----	35	Severe Slope	1.00	Poorly suited Slope	1.00	Slight Strength
Bengal-----	15	Severe Slope Low strength	1.00 0.50	Poorly suited Slope Low strength	1.00 0.50	Moderate Low strength
99: Yanush-----	60	Severe Stoniness Slope	1.00 0.50	Poorly suited Slope Rock fragments Low strength	1.00 1.00 0.50	Severe Low strength
Bigfork-----	35	Severe Stoniness Restrictive layer Slope	1.00 1.00 0.50	Poorly suited Slope Rock fragments Low strength	1.00 1.00 0.50	Moderate Low strength
100: Yanush-----	55	Severe Slope Stoniness Low strength	1.00 1.00 0.50	Poorly suited Slope Rock fragments Low strength	1.00 1.00 0.50	Moderate Low strength
Bigfork-----	30	Severe Slope Stoniness Low strength	1.00 1.00 0.50	Poorly suited Slope Rock fragments Low strength	1.00 1.00 0.50	Moderate Low strength

Soil Survey of Pike County, Arkansas

Table 8a.--Forestland Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landing		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
101: Zafra-----	40	Severe Slope Stoniness Low strength	 1.00 1.00 0.50	Poorly suited Slope Rock fragments	 1.00 1.00	Slight Strength	 0.10
Carnasaw-----	30	Severe Slope Stoniness Low strength	 1.00 1.00 0.50	Poorly suited Slope Rock fragments	 1.00 1.00	Slight Strength	 0.10
Clebit-----	20	Severe Slope Stoniness	 1.00 1.00	Poorly suited Rock fragments Slope	 1.00 1.00	Slight Strength	 0.10

Soil Survey of Pike County, Arkansas

Table 8b.--Forestland Management (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
2, 3: Avilla-----	90	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
4: Avilla-----	100	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
5: Bengal-----	50	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Rock fragments Low strength	0.50 0.50 0.50
Bismarck-----	20	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Rock fragments Low strength	0.50 0.50 0.50
Yanush-----	20	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Rock fragments Low strength	0.50 0.50 0.50
6: Bengal-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50
Bismarck-----	20	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50
Yanush-----	20	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50
7: Bengal-----	55	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50
Bismarck-----	25	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50

Soil Survey of Pike County, Arkansas

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7: Bigfork-----	20	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments Low strength	1.00 1.00 0.50
8: Bigfork-----	65	Slight		Moderate Slope/erodibility	0.50	Poorly suited Rock fragments Slope Low strength	1.00 0.50 0.50
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9: Bigfork-----	45	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Rock fragments Slope Low strength	1.00 1.00 0.50
Yanush-----	30	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Rock fragments Slope Low strength	1.00 1.00 0.50
Rock outcrop-----	15	Not rated		Not rated		Not rated	
10: Billstown-----	85	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Slope	0.50 0.50
11: Billstown-----	90	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
12: Billstown-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Tiak-----	40	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
13: Bonnerdale-----	95	Slight		Moderate Slope/erodibility	0.50	Poorly suited Wetness Low strength Slope	1.00 0.50 0.50
14: Carnasaw-----	70	Slight		Severe Slope/erodibility	0.95	Poorly suited Rock fragments Slope	1.00 0.50
Pirum-----	20	Slight		Moderate Slope/erodibility	0.50	Poorly suited Rock fragments Slope Low strength	1.00 0.50 0.50

Soil Survey of Pike County, Arkansas

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
15: Carnasaw-----	55	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope	0.50
Sherless-----	35	Slight		Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
16: Carnasaw-----	60	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments	1.00 0.50
Sherless-----	35	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope Rock fragments	1.00 0.50
17: Carnasaw-----	50	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments	1.00 0.50
Sherwood-----	25	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50
Zafra-----	15	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments	1.00 1.00
18: Carnasaw-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments	1.00 1.00
Zafra-----	25	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments	1.00 1.00
Clebit-----	15	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope Rock fragments	1.00 1.00
19: Ceda-----	90	Slight		Slight		Poorly suited Flooding	1.00
20: Ceda-----	100	Slight		Slight		Poorly suited Flooding	1.00
21: Clebit-----	40	Slight		Slight		Poorly suited Rock fragments Slope	1.00 0.50
Carnasaw-----	35	Slight		Severe Slope/erodibility	0.95	Poorly suited Rock fragments Slope	1.00 0.50

Soil Survey of Pike County, Arkansas

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21: Pirum-----	15	Slight		Moderate Slope/erodibility	0.50	Poorly suited Rock fragments Slope Low strength	1.00 0.50 0.50
22: Cupco-----	90	Slight		Slight		Moderately suited Wetness Low strength	0.50 0.50
23: Dam-----	100	Not rated		Not rated		Not rated	
24: Dela-----	95	Slight		Slight		Poorly suited Flooding	1.00
25: Dela-----	90	Slight		Slight		Poorly suited Flooding	1.00
26: Delight-----	100	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Slope Stickiness; high plasticity index	0.50 0.50 0.50
27: Gurdon-----	90	Slight		Slight		Moderately suited Flooding Low strength Wetness	0.50 0.50 0.50
28: Guyton-----	100	Slight		Slight		Poorly suited Wetness Low strength	1.00 0.50
29: Guyton-----	100	Slight		Slight		Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50
30: Guyton-----	100	Slight		Slight		Poorly suited Ponding Wetness Low strength	1.00 1.00 0.50
31: Japany-----	90	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50
32: Kenn-----	95	Slight		Slight		Well suited	

Soil Survey of Pike County, Arkansas

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
33: Kenn-----	90	Slight		Slight		Moderately suited Flooding	0.50
34: Kenn-----	90	Slight		Slight		Poorly suited Flooding	1.00
35: Kenn-----	55	Slight		Slight		Poorly suited Flooding	1.00
Ceda-----	35	Slight		Slight		Poorly suited Flooding	1.00
36: Kizzia-----	90	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
37: Leeper-----	95	Slight		Slight		Moderately suited Flooding Low strength Wetness	0.50 0.50 0.50
38: Littlefir-----	60	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
Carnasaw-----	30	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
39: Magnet-----	100	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
40: Marietta-----	95	Slight		Slight		Moderately suited Flooding Low strength Wetness	0.50 0.50 0.50
41: Mazarn-----	100	Slight		Slight		Moderately suited Low strength Wetness	0.50 0.50
42: Mazarn-----	90	Slight		Slight		Poorly suited Flooding Low strength Wetness	1.00 0.50 0.50
43: McCaskill-----	95	Slight		Slight		Moderately suited Low strength Wetness	0.50 0.50

Soil Survey of Pike County, Arkansas

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
44: Mena-----	95	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
45: Mena-----	95	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
46: Mena-----	95	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
47: Murfreesboro-----	90	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
48: Murfreesboro-----	90	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
49: Nathan-----	90	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
50: Nashoba-----	50	Slight		Moderate Slope/erodibility	0.50	Well suited	
Bismarck-----	25	Slight		Moderate Slope/erodibility	0.50	Well suited	
Littlefir-----	20	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
51: Nashoba-----	50	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope	0.50
Bismarck-----	25	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Littlefir-----	20	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
52: Nashoba-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments	1.00 1.00
Littlefir-----	25	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments	1.00 1.00
Sherless-----	15	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50

Soil Survey of Pike County, Arkansas

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
53: Neff-----	95	Slight		Slight		Moderately suited Wetness Flooding Low strength	0.50 0.50 0.50
54: Ochlockonee-----	95	Slight		Slight		Well suited	
55: Ochlockonee-----	95	Slight		Slight		Moderately suited Flooding	0.50
56: Ochlockonee-----	95	Slight		Slight		Poorly suited Flooding	1.00
57: Ouachita-----	95	Slight		Slight		Moderately suited Low strength	0.50
58: Ouachita-----	95	Slight		Slight		Poorly suited Flooding Low strength	1.00 0.50
59: Ozan-----	100	Slight		Slight		Moderately suited Wetness	0.50
60: Ozan-----	100	Slight		Slight		Moderately suited Flooding Wetness	0.50 0.50
61: Peanutrock-----	95	Slight		Slight		Moderately suited Slope	0.50
62: Peanutrock-----	95	Slight		Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
63: Peanutrock-----	90	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope	1.00
64: Peanutrock-----	55	Slight		Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
Tiak-----	35	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
65: Pikecity-----	90	Slight		Moderate Slope/erodibility	0.50	Well suited	

Soil Survey of Pike County, Arkansas

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
66: Pikecreek-----	100	Slight		Slight		Poorly suited Flooding Sandiness	1.00 0.50
67: Pirum-----	50	Slight		Slight		Moderately suited Low strength	0.50
Sherless-----	30	Slight		Moderate Slope/erodibility	0.50	Poorly suited Wetness Low strength Slope	1.00 0.50 0.50
Bonnerdale-----	20	Slight		Moderate Slope/erodibility	0.50	Poorly suited Wetness Low strength	1.00 0.50
68: Pits-----	60	Not rated		Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated		Not rated	
69: Riverwash-----	60	Not rated		Not rated		Not rated	
Ceda-----	35	Slight		Slight		Poorly suited Flooding	1.00
70: Sardis-----	90	Slight		Slight		Moderately suited Low strength	0.50
71: Sardis-----	90	Slight		Slight		Moderately suited Flooding Low strength	0.50 0.50
72: Sherless-----	50	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
Littlefir-----	40	Slight		Moderate Slope/erodibility	0.50	Well suited	
73: Sherless-----	50	Slight		Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
Littlefir-----	25	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope	0.50
Nashoba-----	15	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope	0.50
74: Sherless-----	45	Moderate Slope/erodibility	0.50	Moderate Slope/erodibility	0.50	Poorly suited Slope	1.00
Littlefir-----	30	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00

Soil Survey of Pike County, Arkansas

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
74: Nashoba-----	15	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
75: Sherless-----	60	Slight		Slight		Well suited	
Nashoba-----	30	Slight		Moderate Slope/erodibility	0.50	Poorly suited Rock fragments	1.00
76: Smithton-----	100	Slight		Slight		Poorly suited Wetness Low strength	1.00 0.50
77: Speer-----	95	Slight		Slight		Moderately suited Flooding	0.50
78: Speer-----	95	Slight		Slight		Well suited	
79: Stelltown-----	90	Slight		Slight		Well suited	
80: Stelltown-----	90	Slight		Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
81, 82: Tiak-----	100	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
83: Tiak-----	100	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
84: Tiak-----	60	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
Antoine-----	40	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
85: Tiak-----	50	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
Antoine-----	40	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
86: Toine-----	95	Slight		Slight		Well suited	
87: Toine-----	95	Slight		Slight		Moderately suited Flooding	0.50

Soil Survey of Pike County, Arkansas

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
88: Una-----	100	Slight		Slight		Poorly suited Wetness Flooding Low strength	1.00 0.50 0.50
89: Vaughn-----	90	Slight		Slight		Moderately suited Flooding	0.50
90: Vaughn-----	55	Slight		Slight		Poorly suited Flooding	1.00
Pikecreek-----	35	Slight		Slight		Poorly suited Flooding Sandiness	1.00 0.50
91: Water-----	100	Not rated		Not rated		Not rated	
92: Wetsaw-----	100	Slight		Moderate Slope/erodibility	0.50	Well suited	
93: Woodall-----	100	Slight		Slight		Poorly suited Flooding Wetness Low strength	1.00 1.00 0.50
94: Woodall-----	95	Slight		Slight		Poorly suited Wetness Flooding Low strength	1.00 0.50 0.50
95: Yanush-----	90	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength	0.50
96: Yanush-----	90	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope Low strength	0.50 0.50
97: Yanush-----	50	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Avant-----	35	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
Bengal-----	15	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50

Soil Survey of Pike County, Arkansas

Table 8b.--Forestland Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
98:							
Yanush-----	50	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
Avant-----	35	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
Bengal-----	15	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Low strength	1.00 0.50
99:							
Yanush-----	60	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments Low strength	1.00 1.00 0.50
Bigfork-----	35	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments Low strength	1.00 1.00 0.50
100:							
Yanush-----	55	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments Low strength	1.00 1.00 0.50
Bigfork-----	30	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments Low strength	1.00 1.00 0.50
101:							
Zafra-----	40	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments	1.00 1.00
Carnasaw-----	30	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Slope Rock fragments	1.00 1.00
Clebit-----	20	Severe Slope/erodibility	0.75	Severe Slope/erodibility	0.95	Poorly suited Rock fragments Slope	1.00 1.00

Soil Survey of Pike County, Arkansas

Table 8c.--Forestland Management (Part 3)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Well suited		Well suited		Moderately suited Low strength	0.50
2: Avilla-----	90	Well suited		Well suited		Moderately suited Low strength	0.50
3: Avilla-----	90	Well suited		Moderately suited Rock fragments	0.50	Moderately suited Low strength	0.50
4: Avilla-----	100	Well suited		Moderately suited Slope Rock fragments	0.50 0.50	Moderately suited Low strength	0.50
5: Bengal-----	50	Moderately suited Rock fragments Stickiness; high plasticity index	0.50 0.50	Poorly suited Rock fragments Slope Stickiness; high plasticity index	0.75 0.50 0.50	Moderately suited Rock fragments Low strength	0.50 0.50
Bismarck-----	20	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 0.50	Moderately suited Rock fragments Low strength	0.50 0.50
Yanush-----	20	Moderately suited Rock fragments	0.50	Poorly suited Rock fragments Slope	0.75 0.50	Moderately suited Rock fragments Low strength	0.50 0.50
6: Bengal-----	50	Moderately suited Rock fragments Stickiness; high plasticity index	0.50 0.50	Poorly suited Slope Rock fragments Stickiness; high plasticity index	0.75 0.75 0.50	Moderately suited Rock fragments Low strength Slope	0.50 0.50 0.50
Bismarck-----	20	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 0.75	Moderately suited Rock fragments Low strength Slope	0.50 0.50 0.50
Yanush-----	20	Moderately suited Rock fragments	0.50	Poorly suited Slope Rock fragments	0.75 0.75	Moderately suited Rock fragments Low strength Slope	0.50 0.50 0.50
7: Bengal-----	55	Moderately suited Slope Rock fragments Stickiness; high plasticity index	0.50 0.50 0.50	Unsuited Slope Rock fragments Stickiness; high plasticity index	1.00 0.75 0.50	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50

Soil Survey of Pike County, Arkansas

Table 8c.--Forestland Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7: Bismarck-----	25	Moderately suited Rock fragments Slope	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50
Bigfork-----	20	Poorly suited Rock fragments Slope Stickiness; high plasticity index	0.75 0.50 0.50	Unsuited Slope Rock fragments Stickiness; high plasticity index	1.00 1.00 0.50	Poorly suited Rock fragments Slope Low strength	1.00 1.00 0.50
8: Bigfork-----	65	Unsuited Rock fragments Stickiness; high plasticity index	1.00 0.50	Unsuited Rock fragments Slope Stickiness; high plasticity index	1.00 0.50 0.50	Poorly suited Rock fragments Low strength	1.00 0.50
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9: Bigfork-----	45	Unsuited Rock fragments Slope Stickiness; high plasticity index	1.00 0.50 0.50	Unsuited Slope Rock fragments Stickiness; high plasticity index	1.00 1.00 0.50	Poorly suited Rock fragments Slope Low strength	1.00 1.00 0.50
Yanush-----	30	Unsuited Rock fragments Slope	1.00 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Rock fragments Slope Low strength	1.00 1.00 0.50
Rock outcrop-----	15	Not rated		Not rated		Not rated	
10: Billstown-----	85	Well suited		Moderately suited Rock fragments Slope	0.50 0.50	Moderately suited Low strength	0.50
11: Billstown-----	90	Well suited		Moderately suited Slope Rock fragments	0.50 0.50	Moderately suited Low strength	0.50
12: Billstown-----	50	Well suited		Moderately suited Slope Rock fragments	0.50 0.50	Moderately suited Low strength	0.50
Tiak-----	40	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index Slope	0.75 0.50	Moderately suited Low strength	0.50
13: Bonnerdale-----	95	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength	0.50

Soil Survey of Pike County, Arkansas

Table 8c.--Forestland Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
14: Carnasaw-----	70	Poorly suited Stickiness; high plasticity index Rock fragments	0.75 0.75	Unsuited Rock fragments Stickiness; high plasticity index Slope	1.00 0.75 0.50	Poorly suited Rock fragments	1.00
Pirum-----	20	Poorly suited Rock fragments	0.75	Unsuited Rock fragments Slope	1.00 0.50	Poorly suited Rock fragments Low strength	1.00 0.50
15: Carnasaw-----	55	Poorly suited Stickiness; high plasticity index Rock fragments	0.75 0.50	Poorly suited Rock fragments Stickiness; high plasticity index Slope	0.75 0.75 0.50	Well suited	
Sherless-----	35	Moderately suited Rock fragments	0.50	Poorly suited Rock fragments Slope	0.75 0.50	Well suited	
16: Carnasaw-----	60	Poorly suited Stickiness; high plasticity index Rock fragments	0.75 0.50	Poorly suited Slope Rock fragments Stickiness; high plasticity index	0.75 0.75 0.75	Moderately suited Rock fragments Slope	0.50 0.50
Sherless-----	35	Moderately suited Rock fragments	0.50	Poorly suited Slope Rock fragments	0.75 0.75	Moderately suited Rock fragments Slope	0.50 0.50
17: Carnasaw-----	50	Poorly suited Stickiness; high plasticity index Slope Rock fragments	0.75 0.50 0.50	Unsuited Slope Rock fragments Stickiness; high plasticity index	1.00 0.75 0.75	Poorly suited Slope Rock fragments	1.00 0.50
Sherwood-----	25	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.75	Poorly suited Slope Rock fragments Low strength	1.00 0.50 0.50
Zafra-----	15	Poorly suited Rock fragments Slope	0.75 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Rock fragments Slope	1.00 1.00
18: Carnasaw-----	50	Poorly suited Stickiness; high plasticity index Rock fragments	0.75 0.75	Unsuited Rock fragments Slope Stickiness; high plasticity index	1.00 0.75 0.75	Poorly suited Rock fragments Slope	1.00 0.50
Zafra-----	25	Poorly suited Rock fragments	0.75	Unsuited Rock fragments Slope	1.00 0.75	Poorly suited Rock fragments Slope	1.00 0.50

Soil Survey of Pike County, Arkansas

Table 8c.--Forestland Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
18: Clebit-----	15	Poorly suited Rock fragments	0.75	Unsuited Rock fragments Slope	1.00 0.75	Poorly suited Rock fragments Slope	1.00 0.50
19: Ceda-----	90	Moderately suited Rock fragments	0.50	Unsuited Rock fragments	1.00	Well suited	
20: Ceda-----	100	Moderately suited Rock fragments	0.50	Unsuited Rock fragments	1.00	Well suited	
21: Clebit-----	40	Unsuited Rock fragments	1.00	Unsuited Rock fragments Slope	1.00 0.50	Poorly suited Rock fragments	1.00
Carnasaw-----	35	Poorly suited Stickiness; high plasticity index Rock fragments	0.75 0.75	Unsuited Rock fragments Stickiness; high plasticity index Slope	1.00 0.75 0.50	Poorly suited Rock fragments	1.00
Pirum-----	15	Poorly suited Rock fragments	0.75	Unsuited Rock fragments Slope	1.00 0.50	Poorly suited Rock fragments Low strength	1.00 0.50
22: Cupco-----	90	Well suited		Well suited		Moderately suited Low strength	0.50
23: Dam-----	100	Not rated		Not rated		Not rated	
24: Dela-----	95	Well suited		Well suited		Well suited	
25: Dela-----	90	Well suited		Well suited		Well suited	
26: Delight-----	100	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index Slope	0.75 0.50	Moderately suited Low strength Stickiness; high plasticity index	0.50 0.50
27: Gurdon-----	90	Well suited		Well suited		Moderately suited Low strength	0.50
28, 29: Guyton-----	100	Well suited		Well suited		Moderately suited Low strength	0.50
30: Guyton-----	100	Moderately suited Wetness	0.50	Poorly suited Wetness	0.75	Poorly suited Wetness Low strength	1.00 0.50

Soil Survey of Pike County, Arkansas

Table 8c.--Forestland Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31: Japany-----	90	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Low strength	0.50
32: Kenn-----	95	Well suited		Moderately suited Rock fragments	0.50	Well suited	
33, 34: Kenn-----	90	Well suited		Moderately suited Rock fragments	0.50	Well suited	
35: Kenn-----	55	Moderately suited Rock fragments	0.50	Moderately suited Rock fragments	0.50	Well suited	
Ceda-----	35	Moderately suited Rock fragments	0.50	Unsuited Rock fragments	1.00	Well suited	
36: Kizzia-----	90	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength	0.50
37: Leeper-----	95	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index	0.75	Moderately suited Low strength	0.50
38: Littlefir-----	60	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index Rock fragments Slope	0.75 0.50 0.50	Moderately suited Low strength	0.50
Carnasaw-----	30	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index Rock fragments Slope	0.75 0.50 0.50	Moderately suited Low strength	0.50
39: Magnet-----	100	Poorly suited Stickiness; high plasticity index Rock fragments	0.75 0.50	Poorly suited Slope Stickiness; high plasticity index Rock fragments	0.75 0.75 0.50	Moderately suited Slope	0.50
40: Marietta-----	95	Well suited		Well suited		Moderately suited Low strength	0.50
41: Mazarn-----	100	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Low strength	0.50

Soil Survey of Pike County, Arkansas

Table 8c.--Forestland Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
42: Mazarn-----	90	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Low strength	0.50
43: McCaskill-----	95	Well suited		Well suited		Moderately suited Low strength	0.50
44: Mena-----	95	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Rock fragments Stickiness; high plasticity index	0.50 0.50	Moderately suited Low strength	0.50
45: Mena-----	95	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Slope Rock fragments Stickiness; high plasticity index	0.50 0.50 0.50	Moderately suited Low strength	0.50
46: Mena-----	95	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Low strength	0.50
47: Murfreesboro-----	90	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Rock fragments Stickiness; high plasticity index	0.50 0.50	Moderately suited Low strength	0.50
48: Murfreesboro-----	90	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Low strength	0.50
49: Nathan-----	90	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength	0.50
50: Nashoba-----	50	Moderately suited Rock fragments	0.50	Moderately suited Rock fragments Slope	0.50 0.50	Well suited	
Bismarck-----	25	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 0.50	Well suited	
Littlefir-----	20	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index Rock fragments Slope	0.75 0.50 0.50	Moderately suited Low strength	0.50
51: Nashoba-----	50	Moderately suited Rock fragments	0.50	Poorly suited Rock fragments Slope	0.75 0.50	Well suited	

Soil Survey of Pike County, Arkansas

Table 8c.--Forestland Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51: Bismarck-----	25	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 0.50	Moderately suited Low strength	0.50
Littlefir-----	20	Poorly suited Stickiness; high plasticity index Rock fragments	0.75 0.50	Poorly suited Stickiness; high plasticity index Rock fragments Slope	0.75 0.50	Moderately suited Low strength	0.50
52: Nashoba-----	50	Poorly suited Rock fragments	0.75	Unsuited Rock fragments Slope	1.00 0.75	Poorly suited Rock fragments Slope	1.00 0.50
Littlefir-----	25	Poorly suited Stickiness; high plasticity index Rock fragments	0.75 0.75	Unsuited Rock fragments Slope Stickiness; high plasticity index	1.00 0.75 0.75	Poorly suited Rock fragments Slope	1.00 0.50
Sherless-----	15	Moderately suited Rock fragments	0.50	Poorly suited Rock fragments Slope	0.75 0.75	Moderately suited Rock fragments Low strength Slope	0.50 0.50 0.50
53: Neff-----	95	Well suited		Well suited		Moderately suited Low strength	0.50
54, 55, 56: Ochlockonee-----	95	Well suited		Well suited		Well suited	
57, 58: Ouachita-----	95	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Low strength	0.50
59, 60: Ozan-----	100	Well suited		Well suited		Well suited	
61, 62: Peanutrock-----	95	Moderately suited Rock fragments	0.50	Poorly suited Rock fragments Slope	0.75 0.50	Well suited	
63: Peanutrock-----	90	Moderately suited Rock fragments	0.50	Poorly suited Slope Rock fragments	0.75 0.75	Moderately suited Slope	0.50
64: Peanutrock-----	55	Moderately suited Rock fragments	0.50	Poorly suited Rock fragments Slope	0.75 0.50	Well suited	

Soil Survey of Pike County, Arkansas

Table 8c.--Forestland Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
64: Tiak-----	35	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index Slope	0.75 0.50	Moderately suited Low strength	0.50
65: Pikecity-----	90	Moderately suited Stickiness; high plasticity index	0.50	Moderately suited Slope Stickiness; high plasticity index	0.50 0.50	Well suited	
66: Pikecreek-----	100	Moderately suited Sandiness Rock fragments	0.50 0.50	Poorly suited Rock fragments Sandiness	0.75 0.50	Moderately suited Sandiness	0.50
67: Pirum-----	50	Well suited		Well suited		Moderately suited Low strength	0.50
Sherless-----	30	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength	0.50
Bonnerdale-----	20	Well suited		Well suited		Moderately suited Low strength	0.50
68: Pits-----	60	Not rated		Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated		Not rated	
69: Riverwash-----	60	Not rated		Not rated		Not rated	
Ceda-----	35	Moderately suited Rock fragments	0.50	Unsuited Rock fragments	1.00	Well suited	
70, 71: Sardis-----	90	Well suited		Well suited		Moderately suited Low strength	0.50
72: Sherless-----	50	Well suited		Moderately suited Rock fragments Slope	0.50 0.50	Moderately suited Low strength	0.50
Littlefir-----	40	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index Rock fragments Slope	0.75 0.50 0.50	Well suited	
73: Sherless-----	50	Moderately suited Rock fragments	0.50	Poorly suited Rock fragments Slope	0.75 0.50	Well suited	

Soil Survey of Pike County, Arkansas

Table 8c.--Forestland Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
73:							
Littlefir-----	25	Poorly suited Stickiness; high plasticity index Rock fragments	0.75 0.50	Poorly suited Rock fragments Stickiness; high plasticity index Slope	0.75 0.75 0.50	Well suited	
Nashoba-----	15	Moderately suited Rock fragments	0.50	Poorly suited Rock fragments Slope	0.75 0.50	Well suited	
74:							
Sherless-----	45	Moderately suited Rock fragments	0.50	Poorly suited Slope Rock fragments	0.75 0.75	Moderately suited Slope	0.50
Littlefir-----	30	Poorly suited Stickiness; high plasticity index Rock fragments	0.75 0.50	Poorly suited Slope Rock fragments Stickiness; high plasticity index	0.75 0.75 0.75	Moderately suited Slope	0.50
Nashoba-----	15	Moderately suited Rock fragments	0.50	Poorly suited Slope Rock fragments	0.75 0.50	Moderately suited Slope	0.50
75:							
Sherless-----	60	Moderately suited Rock fragments	0.50	Poorly suited Rock fragments Slope	0.75 0.50	Well suited	
Nashoba-----	30	Poorly suited Rock fragments	0.75	Unsuited Rock fragments Slope	1.00 0.50	Poorly suited Rock fragments	1.00
76:							
Smithton-----	100	Well suited		Well suited		Moderately suited Low strength	0.50
77, 78:							
Speer-----	95	Well suited		Well suited		Well suited	
79:							
Stelltown-----	90	Well suited		Well suited		Well suited	
80:							
Stelltown-----	90	Well suited		Moderately suited Slope	0.50	Well suited	
81:							
Tiak-----	100	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index Slope	0.75 0.50	Moderately suited Low strength	0.50
82, 83:							
Tiak-----	100	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index Rock fragments Slope	0.75 0.50 0.50	Moderately suited Low strength	0.50

Soil Survey of Pike County, Arkansas

Table 8c.--Forestland Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
84: Tiak-----	60	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index Rock fragments Slope	0.75 0.50 0.50	Moderately suited Low strength	0.50
Antoine-----	40	Well suited		Well suited		Moderately suited Low strength	0.50
85: Tiak-----	50	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index Slope Rock fragments	0.75 0.50 0.50	Moderately suited Low strength	0.50
Antoine-----	40	Well suited		Moderately suited Slope	0.50	Moderately suited Low strength	0.50
86, 87: Toine-----	95	Well suited		Well suited		Well suited	
88: Una-----	100	Poorly suited Stickiness; high plasticity index	0.75	Poorly suited Stickiness; high plasticity index	0.75	Moderately suited Low strength	0.50
89: Vaughn-----	90	Well suited		Moderately suited Rock fragments	0.50	Well suited	
90: Vaughn-----	55	Well suited		Moderately suited Rock fragments	0.50	Well suited	
Pikecreek-----	35	Moderately suited Sandiness Rock fragments	0.50 0.50	Poorly suited Rock fragments Sandiness	0.75 0.50	Moderately suited Sandiness	0.50
91: Water-----	100	Not rated		Not rated		Not rated	
92: Wetsaw-----	100	Well suited		Well suited		Well suited	
93: Woodall-----	100	Well suited		Well suited		Moderately suited Low strength	0.50
94: Woodall-----	95	Well suited		Well suited		Moderately suited Low strength	0.50
95, 96: Yanush-----	90	Moderately suited Rock fragments	0.50	Poorly suited Rock fragments Slope	0.75 0.50	Moderately suited Low strength	0.50

Soil Survey of Pike County, Arkansas

Table 8c.--Forestland Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
97:							
Yanush-----	50	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 0.75	Moderately suited Low strength Slope	0.50 0.50
Avant-----	35	Moderately suited Rock fragments	0.50	Unsuited Rock fragments Slope	1.00 0.75	Moderately suited Slope	0.50
Bengal-----	15	Moderately suited Rock fragments Stickiness; high plasticity index	0.50 0.50	Poorly suited Slope Rock fragments Stickiness; high plasticity index	0.75 0.75 0.50	Moderately suited Low strength Slope	0.50 0.50
98:							
Yanush-----	50	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 0.75	Poorly suited Slope Low strength	1.00 0.50
Avant-----	35	Moderately suited Slope Rock fragments	0.50 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Slope	1.00
Bengal-----	15	Moderately suited Slope Rock fragments Stickiness; high plasticity index	0.50 0.50 0.50	Unsuited Slope Rock fragments Stickiness; high plasticity index	1.00 1.00 0.50	Poorly suited Slope Low strength	1.00 0.50
99:							
Yanush-----	60	Poorly suited Rock fragments	0.75	Unsuited Rock fragments Slope	1.00 0.75	Poorly suited Rock fragments Low strength Slope	1.00 0.50 0.50
Bigfork-----	35	Poorly suited Rock fragments Stickiness; high plasticity index	0.75 0.50	Unsuited Rock fragments Slope Stickiness; high plasticity index	1.00 0.75 0.50	Poorly suited Rock fragments Low strength Slope	1.00 0.50 0.50
100:							
Yanush-----	55	Poorly suited Rock fragments Slope	0.75 0.50	Unsuited Slope Rock fragments	1.00 1.00	Poorly suited Rock fragments Slope Low strength	1.00 1.00 0.50
Bigfork-----	30	Poorly suited Rock fragments Slope Stickiness; high plasticity index	0.75 0.50 0.50	Unsuited Slope Rock fragments Stickiness; high plasticity index	1.00 1.00 0.50	Poorly suited Rock fragments Slope Low strength	1.00 1.00 0.50

Soil Survey of Pike County, Arkansas

Table 8c.--Forestland Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
101: Zafra-----	40	Poorly suited Rock fragments Slope	 0.75 0.50	Unsuited Slope Rock fragments	 1.00 1.00	Poorly suited Rock fragments Slope	 1.00 1.00
Carnasaw-----	30	Poorly suited Stickiness; high plasticity index Rock fragments Slope	 0.75 0.75 0.50	Unsuited Slope Rock fragments Stickiness; high plasticity index	 1.00 1.00 0.75	Poorly suited Rock fragments Slope	 1.00 1.00
Clebit-----	20	Unsuited Rock fragments Slope	 1.00 0.50	Unsuited Slope Rock fragments	 1.00 1.00	Poorly suited Rock fragments Slope	 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 8d.--Forestland Management (Part 4)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Well suited		Well suited	
2, 3: Avilla-----	90	Well suited		Well suited	
4: Avilla-----	100	Well suited		Well suited	
5: Bengal-----	50	Poorly suited Rock fragments	0.50	Poorly suited Rock fragments	0.50
Bismarck-----	20	Poorly suited Rock fragments	0.50	Poorly suited Rock fragments	0.50
Yanush-----	20	Poorly suited Rock fragments	0.50	Poorly suited Rock fragments	0.50
6: Bengal-----	50	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Rock fragments	0.50 0.50
Bismarck-----	20	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Rock fragments	0.50 0.50
Yanush-----	20	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Rock fragments	0.50 0.50
7: Bengal-----	55	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Rock fragments	1.00 0.50
Bismarck-----	25	Unsuited Slope Rock fragments	1.00 0.50	Unsuited Slope Rock fragments	1.00 0.50
Bigfork-----	20	Unsuited Slope Rock fragments	1.00 1.00	Unsuited Slope Rock fragments	1.00 1.00
8: Bigfork-----	65	Unsuited Rock fragments	1.00	Unsuited Rock fragments	1.00
Rock outcrop-----	25	Not rated		Not rated	

Soil Survey of Pike County, Arkansas

Table 8d.--Forestland Management (Part 4)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
9: Bigfork-----	45	Unsuited Rock fragments Slope	1.00 1.00	Unsuited Rock fragments Slope	1.00 1.00
Yanush-----	30	Unsuited Rock fragments Slope	1.00 1.00	Unsuited Rock fragments Slope	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
10: Billstown-----	85	Well suited		Well suited	
11: Billstown-----	90	Well suited		Well suited	
12: Billstown-----	50	Well suited		Well suited	
Tiak-----	40	Poorly suited Stickiness; high plasticity index	0.50	Well suited	
13: Bonnerdale-----	95	Well suited		Well suited	
14: Carnasaw-----	70	Unsuited Rock fragments Stickiness; high plasticity index	1.00 0.50	Unsuited Rock fragments	1.00
Pirum-----	20	Unsuited Rock fragments	1.00	Unsuited Rock fragments	1.00
15: Carnasaw-----	55	Poorly suited Rock fragments Stickiness; high plasticity index	0.50 0.50	Well suited	
Sherless-----	35	Poorly suited Rock fragments	0.50	Well suited	
16: Carnasaw-----	60	Poorly suited Slope Rock fragments Stickiness; high plasticity index	0.50 0.50 0.50	Poorly suited Slope Rock fragments	0.50 0.50
Sherless-----	35	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Rock fragments	0.50 0.50

Soil Survey of Pike County, Arkansas

Table 8d.--Forestland Management (Part 4)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
17:					
Carnasaw-----	50	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
		Stickiness; high plasticity index	0.50		
Sherwood-----	25	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
Zafra-----	15	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	1.00	Rock fragments	1.00
18:					
Carnasaw-----	50	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
		Slope	0.50	Slope	0.50
		Stickiness; high plasticity index	0.50		
Zafra-----	25	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
		Slope	0.50	Slope	0.50
Clebit-----	15	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
		Slope	0.50	Slope	0.50
19:					
Ceda-----	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
20:					
Ceda-----	100	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
21:					
Clebit-----	40	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
Carnasaw-----	35	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
		Stickiness; high plasticity index	0.50		
Pirum-----	15	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
22:					
Cupco-----	90	Well suited		Well suited	
23:					
Dam-----	100	Not rated		Not rated	
24:					
Dela-----	95	Well suited		Well suited	

Soil Survey of Pike County, Arkansas

Table 8d.--Forestland Management (Part 4)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
25: Dela-----	90	Well suited		Well suited	
26: Delight-----	100	Poorly suited Stickiness; high plasticity index	0.50	Well suited	
27: Gurdon-----	90	Well suited		Well suited	
28, 29: Guyton-----	100	Well suited		Well suited	
30: Guyton-----	100	Poorly suited Wetness	0.50	Unsuited Wetness	1.00
31: Japany-----	90	Poorly suited Stickiness; high plasticity index	0.50	Well suited	
32: Kenn-----	95	Well suited		Well suited	
33, 34: Kenn-----	90	Well suited		Well suited	
35: Kenn-----	55	Poorly suited Rock fragments	0.50	Well suited	
Ceda-----	35	Poorly suited Rock fragments	0.50	Poorly suited Rock fragments	0.50
36: Kizzia-----	90	Well suited		Well suited	
37: Leeper-----	95	Poorly suited Stickiness; high plasticity index	0.50	Well suited	
38: Littlefir-----	60	Poorly suited Stickiness; high plasticity index	0.50	Well suited	
Carnasaw-----	30	Poorly suited Stickiness; high plasticity index	0.50	Well suited	
39: Magnet-----	100	Poorly suited Slope Rock fragments Stickiness; high plasticity index	0.50 0.50 0.50	Poorly suited Slope	0.50

Soil Survey of Pike County, Arkansas

Table 8d.--Forestland Management (Part 4)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
40: Marietta-----	95	Well suited		Well suited	
41: Mazarn-----	100	Well suited		Well suited	
42: Mazarn-----	90	Well suited		Well suited	
43: McCaskill-----	95	Well suited		Well suited	
44, 45, 46: Mena-----	95	Well suited		Well suited	
47, 48: Murfreesboro-----	90	Well suited		Well suited	
49: Nathan-----	90	Well suited		Well suited	
50: Nashoba-----	50	Poorly suited Rock fragments	0.50	Well suited	
Bismarck-----	25	Poorly suited Rock fragments	0.50	Well suited	
Littlefir-----	20	Poorly suited Stickiness; high plasticity index	0.50	Well suited	
51: Nashoba-----	50	Poorly suited Rock fragments	0.50	Well suited	
Bismarck-----	25	Poorly suited Rock fragments	0.50	Well suited	
Littlefir-----	20	Poorly suited Rock fragments Stickiness; high plasticity index	0.50	Well suited	
52: Nashoba-----	50	Unsuited Rock fragments Slope	1.00 0.50	Unsuited Rock fragments Slope	1.00 0.50
Littlefir-----	25	Unsuited Rock fragments Slope Stickiness; high plasticity index	1.00 0.50 0.50	Unsuited Rock fragments Slope	1.00 0.50
Sherless-----	15	Poorly suited Rock fragments Slope	0.50 0.50	Poorly suited Rock fragments Slope	0.50 0.50

Soil Survey of Pike County, Arkansas

Table 8d.--Forestland Management (Part 4)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)	Value	Suitability for mechanical site preparation (deep)	Value
		Rating class and limiting features		Rating class and limiting features	
53: Neff-----	95	Well suited		Well suited	
54, 55, 56: Ochlockonee-----	95	Well suited		Well suited	
55: Ochlockonee-----	95	Well suited		Well suited	
56: Ochlockonee-----	95	Well suited		Well suited	
57, 58: Ouachita-----	95	Well suited		Well suited	
59, 60: Ozan-----	100	Well suited		Well suited	
61, 62: Peanutrock-----	95	Poorly suited Rock fragments	0.50	Well suited	
63: Peanutrock-----	90	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope	0.50
64: Peanutrock-----	55	Poorly suited Rock fragments	0.50	Well suited	
Tiak-----	35	Poorly suited Stickiness; high plasticity index	0.50	Well suited	
65: Pikecity-----	90	Well suited		Well suited	
66: Pikecreek-----	100	Poorly suited Rock fragments	0.50	Poorly suited Rock fragments	0.50
67: Pirum-----	50	Well suited		Well suited	
Sherless-----	30	Well suited		Well suited	
Bonnerdale-----	20	Well suited		Well suited	
68: Pits-----	60	Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated	
69: Riverwash-----	60	Not rated		Not rated	
Ceda-----	35	Poorly suited Rock fragments	0.50	Poorly suited Rock fragments	0.50

Soil Survey of Pike County, Arkansas

Table 8d.--Forestland Management (Part 4)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
70, 71: Sardis-----	90	Well suited		Well suited	
72: Sherless-----	50	Well suited		Well suited	
Littlefir-----	40	Poorly suited Stickiness; high plasticity index	0.50	Well suited	
73: Sherless-----	50	Poorly suited Rock fragments	0.50	Well suited	
Littlefir-----	25	Poorly suited Rock fragments Stickiness; high plasticity index	0.50 0.50	Well suited	
Nashoba-----	15	Poorly suited Rock fragments	0.50	Well suited	
74: Sherless-----	45	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope	0.50
Littlefir-----	30	Poorly suited Slope Rock fragments Stickiness; high plasticity index	0.50 0.50 0.50	Poorly suited Slope	0.50
Nashoba-----	15	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope	0.50
75: Sherless-----	60	Poorly suited Rock fragments	0.50	Well suited	
Nashoba-----	30	Unsuited Rock fragments	1.00	Unsuited Rock fragments	1.00
76: Smithton-----	100	Well suited		Well suited	
77, 78: Speer-----	95	Well suited		Well suited	
79, 80: Stelltown-----	90	Well suited		Well suited	
81, 82, 83: Tiak-----	100	Poorly suited Stickiness; high plasticity index	0.50	Well suited	

Soil Survey of Pike County, Arkansas

Table 8d.--Forestland Management (Part 4)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
84: Tiak-----	60	Poorly suited Stickiness; high plasticity index	0.50	Well suited	
Antoine-----	40	Well suited		Well suited	
85: Tiak-----	50	Poorly suited Stickiness; high plasticity index	0.50	Well suited	
Antoine-----	40	Well suited		Well suited	
86, 87: Toine-----	95	Well suited		Well suited	
88: Una-----	100	Poorly suited Stickiness; high plasticity index	0.50	Well suited	
89: Vaughn-----	90	Well suited		Well suited	
90: Vaughn-----	55	Well suited		Well suited	
Pikecreek-----	35	Poorly suited Rock fragments	0.50	Well suited	
91: Water-----	100	Not rated		Not rated	
92: Wetsaw-----	100	Well suited		Well suited	
93: Woodall-----	100	Well suited		Well suited	
94: Woodall-----	95	Well suited		Well suited	
95, 96: Yanush-----	90	Poorly suited Rock fragments	0.50	Well suited	
97: Yanush-----	50	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope Rock fragments	0.50 0.50
Avant-----	35	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope	0.50
Bengal-----	15	Poorly suited Slope Rock fragments	0.50 0.50	Poorly suited Slope	0.50

Soil Survey of Pike County, Arkansas

Table 8d.--Forestland Management (Part 4)--Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
98:					
Yanush-----	50	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50		
Avant-----	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50		
Bengal-----	15	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
99:					
Yanush-----	60	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
		Slope	0.50	Slope	0.50
Bigfork-----	35	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
		Slope	0.50	Slope	0.50
100:					
Yanush-----	55	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	1.00	Rock fragments	1.00
Bigfork-----	30	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	1.00	Rock fragments	1.00
101:					
Zafra-----	40	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	1.00	Rock fragments	1.00
Carnasaw-----	30	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	1.00	Rock fragments	1.00
		Stickiness; high plasticity index	0.50		
Clebit-----	20	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
		Slope	1.00	Slope	1.00

Soil Survey of Pike County, Arkansas

Table 8e.--Forestland Management (Part 5)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Moderate Texture/surface depth/rock fragments	0.50	Low	
2, 3: Avilla-----	90	High Texture/surface depth/rock fragments	1.00	Low	
4: Avilla-----	100	High Texture/surface depth/rock fragments	1.00	Low	
5: Bengal-----	50	High Texture/surface depth/rock fragments	1.00	Low	
Bismarck-----	20	Moderate Texture/rock fragments	0.50	Low	
Yanush-----	20	Moderate Texture/rock fragments	0.50	Low	
6: Bengal-----	50	High Texture/surface depth/rock fragments	1.00	Moderate Available water	0.50
Bismarck-----	20	Moderate Texture/rock fragments	0.50	Moderate Available water	0.50
Yanush-----	20	Moderate Texture/rock fragments	0.50	Moderate Available water	0.50
7: Bengal-----	55	High Texture/slope/surface depth/rock fragments	1.00	Moderate Available water	0.50
Bismarck-----	25	Moderate Texture/slope/rock fragments	0.50	Moderate Available water	0.50
Bigfork-----	20	High Texture/slope/surface depth/rock fragments	1.00	Moderate Available water	0.50
8: Bigfork-----	65	High Texture/slope/rock fragments Texture/surface depth/rock fragments	1.00 1.00	Low	
Rock outcrop-----	25	Not rated		Not rated	

Soil Survey of Pike County, Arkansas

Table 8e.--Forestland Management (Part 5)--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
9: Bigfork-----	45	High Texture/slope/surface depth/rock fragments	1.00	Moderate Available water	0.50
Yanush-----	30	High Texture/slope/rock fragments	1.00	Moderate Available water	0.50
Rock outcrop-----	15	Not rated		Not rated	
10: Billstown-----	85	Low Texture/rock fragments	0.10	Low	
11: Billstown-----	90	Low Texture/rock fragments	0.10	Low	
12: Billstown-----	50	Low Texture/rock fragments	0.10	Low	
Tiak-----	40	Low Texture/rock fragments	0.10	Low	
13: Bonnerdale-----	95	Moderate Texture/surface depth/rock fragments	0.50	High Wetness	1.00
14: Carnasaw-----	70	High Texture/surface depth/rock fragments	1.00	Low	
Pirum-----	20	High Texture/surface depth/rock fragments	1.00	Low	
15: Carnasaw-----	55	High Texture/surface depth/rock fragments	1.00	Low	
Sherless-----	35	Moderate Texture/rock fragments	0.50	Low	
16: Carnasaw-----	60	High Texture/surface depth/rock fragments	1.00	Moderate Available water	0.50
Sherless-----	35	Moderate Texture/rock fragments	0.50	Moderate Available water	0.50
17: Carnasaw-----	50	High Texture/slope/surface depth/rock fragments	1.00	Moderate Available water	0.50
Sherwood-----	25	High Texture/slope/surface depth/rock fragments	1.00	Moderate Available water	0.50

Soil Survey of Pike County, Arkansas

Table 8e.--Forestland Management (Part 5)--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
17: Zafra-----	15	High Texture/slope/surface depth/rock fragments	1.00	Moderate Available water	0.50
18: Carnasaw-----	50	High Texture/surface depth/rock fragments	1.00	Moderate Available water	0.50
Zafra-----	25	High Texture/surface depth/rock fragments	1.00	Moderate Available water	0.50
Clebit-----	15	High Texture/surface depth/rock fragments	1.00	Moderate Available water	0.50
19: Ceda-----	90	High Texture/rock fragments	1.00	Low	
20: Ceda-----	100	Moderate Texture/rock fragments	0.50	Low	
21: Clebit-----	40	High Texture/slope/surface depth/rock fragments	1.00	Low	
Carnasaw-----	35	High Texture/surface depth/rock fragments	1.00	Low	
Pirum-----	15	High Texture/surface depth/rock fragments	1.00	Low	
22: Cupco-----	90	High Texture/surface depth/rock fragments	1.00	High Wetness	1.00
23: Dam-----	100	Not rated		Not rated	
24: Dela-----	95	High Texture/surface depth/rock fragments	1.00	Low	
25: Dela-----	90	High Texture/surface depth/rock fragments	1.00	Low	
26: Delight-----	100	Moderate Texture/surface depth/rock fragments	0.50	Low	
27: Gurdon-----	90	Moderate Texture/surface depth/rock fragments	0.50	Low	
28, 29, 30: Guyton-----	100	Low Texture/rock fragments	0.10	High Wetness	1.00

Soil Survey of Pike County, Arkansas

Table 8e.--Forestland Management (Part 5)--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
31: Japany-----	90	Moderate Texture/rock fragments	0.50	High Wetness	1.00
32: Kenn-----	95	Moderate Texture/rock fragments	0.50	Low	
33, 34: Kenn-----	90	Moderate Texture/rock fragments	0.50	Low	
35: Kenn-----	55	Moderate Texture/rock fragments	0.50	Low	
Ceda-----	35	High Texture/rock fragments	1.00	Low	
36: Kizzia-----	90	Moderate Texture/surface depth/rock fragments	0.50	Low	
37: Leeper-----	95	Moderate Texture/surface depth/rock fragments	0.50	Low	
38: Littlefir-----	60	High Texture/surface depth/rock fragments	1.00	Low	
Carnasaw-----	30	High Texture/surface depth/rock fragments	1.00	Low	
39: Magnet-----	100	Low Texture/rock fragments	0.10	Moderate Available water	0.50
40: Marietta-----	95	Low Texture/rock fragments	0.10	Low	
41, 42: Mazarn-----	100	Moderate Texture/surface depth/rock fragments	0.50	Low	
43: McCaskill-----	95	Moderate Texture/rock fragments	0.50	High Wetness	1.00
44, 45, 46: Mena-----	95	Low Texture/rock fragments	0.10	Low	
47, 48: Murfreesboro-----	90	Moderate Texture/rock fragments	0.50	Low	
49: Nathan-----	90	Low Texture/rock fragments	0.10	Low	

Soil Survey of Pike County, Arkansas

Table 8e.--Forestland Management (Part 5)--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
50, 51: Nashoba-----	50	High Texture/surface depth/rock fragments	1.00	Low	
Bismarck-----	25	Moderate Texture/rock fragments	0.50	Low	
Littlefir-----	20	High Texture/surface depth/rock fragments	1.00	Low	
52: Nashoba-----	50	High Texture/surface depth/rock fragments	1.00	Moderate Available water	0.50
Littlefir-----	25	High Texture/surface depth/rock fragments	1.00	Moderate Available water	0.50
Sherless-----	15	Moderate Texture/rock fragments	0.50	Moderate Available water	0.50
53: Neff-----	95	High Texture/surface depth/rock fragments	1.00	Low	
54, 55, 56: Ochlockonee-----	95	High Texture/surface depth/rock fragments	1.00	Low	
57, 58: Ouachita-----	95	Moderate Texture/rock fragments	0.50	Low	
59, 60: Ozan-----	100	High Texture/surface depth/rock fragments	1.00	Low	
61, 62: Peanutrock-----	95	High Texture/surface depth/rock fragments	1.00	Low	
63: Peanutrock-----	90	High Texture/surface depth/rock fragments	1.00	Moderate Available water	0.50
64: Peanutrock-----	55	High Texture/surface depth/rock fragments	1.00	Low	
Tiak-----	35	Low Texture/rock fragments	0.10	Low	
65: Pikecity-----	90	Not rated		Low	
66: Pikecreek-----	100	High Texture/surface depth/rock fragments	1.00	Low	
67: Pirum-----	50	High Texture/surface depth/rock fragments	1.00	Low	

Soil Survey of Pike County, Arkansas

Table 8e.--Forestland Management (Part 5)--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
67:					
Sherless-----	30	Low Texture/rock fragments	0.10	High Wetness	1.00
Bonnerdale-----	20	Moderate Texture/surface depth/rock fragments	0.50	High Wetness	1.00
68:					
Pits-----	60	Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated	
69:					
Riverwash-----	60	Not rated		Not rated	
Ceda-----	35	High Texture/rock fragments	1.00	Low	
70, 71:					
Sardis-----	90	Low Texture/rock fragments	0.10	Low	
72:					
Sherless-----	50	Moderate Texture/rock fragments	0.50	Low	
Littlefir-----	40	High Texture/surface depth/rock fragments	1.00	Low	
73:					
Sherless-----	50	Moderate Texture/rock fragments	0.50	Low	
Littlefir-----	25	High Texture/surface depth/rock fragments	1.00	Low	
Nashoba-----	15	High Texture/surface depth/rock fragments	1.00	Low	
74:					
Sherless-----	45	Moderate Texture/rock fragments	0.50	Moderate Available water	0.50
Littlefir-----	30	High Texture/surface depth/rock fragments	1.00	Moderate Available water	0.50
Nashoba-----	15	High Texture/surface depth/rock fragments	1.00	Moderate Available water	0.50
75:					
Sherless-----	60	Moderate Texture/rock fragments	0.50	Low	
Nashoba-----	30	High Texture/surface depth/rock fragments	1.00	Low	
76:					
Smithton-----	100	Moderate Texture/surface depth/rock fragments	0.50	High Wetness	1.00

Soil Survey of Pike County, Arkansas

Table 8e.--Forestland Management (Part 5)--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
77, 78: Speer-----	95	High Texture/surface depth/rock fragments	1.00	Low	
79, 80: Stelltown-----	90	Low Texture/rock fragments	0.10	Low	
81, 82, 83: Tiak-----	100	Low Texture/rock fragments	0.10	Low	
84, 85: Tiak-----	60	Low Texture/rock fragments	0.10	Low	
Antoine-----	40	Moderate Texture/surface depth/rock fragments	0.50	Low	
86, 87: Toine-----	95	Low Texture/rock fragments	0.10	Low	
88: Una-----	100	Low Texture/rock fragments	0.10	High Wetness	1.00
89: Vaughn-----	90	Moderate Texture/surface depth/rock fragments	0.50	Low	
90: Vaughn-----	55	Moderate Texture/surface depth/rock fragments	0.50	Low	
Pikecreek-----	35	High Texture/surface depth/rock fragments	1.00	Low	
91: Water-----	100	Not rated		Not rated	
92: Wetsaw-----	100	High Texture/surface depth/rock fragments	1.00	Low	
93: Woodall-----	100	Moderate Texture/surface depth/rock fragments	0.50	High Wetness	1.00
94: Woodall-----	95	Moderate Texture/surface depth/rock fragments	0.50	High Wetness	1.00
95, 96: Yanush-----	90	High Texture/rock fragments	1.00	Low	
97: Yanush-----	50	High Texture/rock fragments	1.00	Moderate Available water	0.50

Soil Survey of Pike County, Arkansas

Table 8e.--Forestland Management (Part 5)--Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
97:					
Avant-----	35	Moderate Texture/surface depth/rock fragments	0.50	Moderate Available water	0.50
Bengal-----	15	High Texture/surface depth/rock fragments	1.00	Moderate Available water	0.50
98:					
Yanush-----	50	Moderate Texture/slope/rock fragments	0.50	Moderate Available water	0.50
Avant-----	35	High Texture/slope/surface depth/rock fragments	1.00	Moderate Available water	0.50
Bengal-----	15	High Texture/slope/surface depth/rock fragments	1.00	Moderate Available water	0.50
99:					
Yanush-----	60	High Texture/rock fragments	1.00	Moderate Available water	0.50
Bigfork-----	35	High Texture/surface depth/rock fragments	1.00	Moderate Available water	0.50
100:					
Yanush-----	55	High Texture/slope/rock fragments	1.00	Moderate Available water	0.50
Bigfork-----	30	High Texture/slope/surface depth/rock fragments	1.00	Moderate Available water	0.50
101:					
Zafra-----	40	High Texture/slope/surface depth/rock fragments	1.00	Moderate Available water	0.50
Carnasaw-----	30	High Texture/slope/surface depth/rock fragments	1.00	Moderate Available water	0.50
Clebit-----	20	High Texture/slope/surface depth/rock fragments	1.00	Moderate Available water	0.50

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Somewhat limited Slow water movement Depth to saturated zone	0.96 0.39	Somewhat limited Slow water movement Depth to saturated zone	0.96 0.19	Somewhat limited Slow water movement Depth to saturated zone Slope	0.96 0.39 0.12
2: Avilla-----	90	Not limited		Not limited		Somewhat limited Slope Gravel	0.50 0.01
3: Avilla-----	90	Somewhat limited Gravel	0.26	Somewhat limited Gravel	0.26	Very limited Gravel Slope	1.00 0.50
4: Avilla-----	100	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Slope Gravel	1.00 0.50
5: Bengal-----	50	Very limited Large stones Slow water movement Slope	1.00 0.96 0.63	Very limited Large stones Slow water movement Slope	1.00 0.96 0.63	Very limited Large stones Slope Slow water movement Gravel Depth to bedrock	1.00 1.00 0.96 0.12 0.03
Bismarck-----	20	Very limited Large stones Depth to bedrock Slope	1.00 1.00 0.63	Very limited Large stones Depth to bedrock Slope	1.00 1.00 0.63	Very limited Large stones Slope Depth to bedrock	1.00 1.00 1.00
Yanush-----	20	Very limited Large stones Slope	1.00 0.63	Very limited Large stones Slope	1.00 0.63	Very limited Large stones Slope Gravel	1.00 1.00 0.28
6: Bengal-----	50	Very limited Too steep Large stones Slow water movement	1.00 1.00 0.96	Very limited Large stones Too steep Slow water movement	1.00 1.00 0.96	Very limited Large stones Slope Slow water movement Gravel Depth to bedrock	1.00 1.00 0.96 0.12 0.03
Bismarck-----	20	Very limited Too steep Large stones Depth to bedrock	1.00 1.00 1.00	Very limited Large stones Too steep Depth to bedrock	1.00 1.00 1.00	Very limited Large stones Slope Depth to bedrock	1.00 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6: Yanush-----	20	Very limited Too steep Large stones	 1.00 1.00	Very limited Large stones Too steep	 1.00 1.00	Very limited Large stones Slope Gravel	 1.00 1.00 0.28
7: Bengal-----	55	Very limited Too steep Large stones Slow water movement	 1.00 1.00 0.96	Very limited Large stones Too steep Slow water movement	 1.00 1.00 0.96	Very limited Large stones Slope Slow water movement Depth to bedrock	 1.00 1.00 0.96 0.03
Bismarck-----	25	Very limited Too steep Large stones Depth to bedrock	 1.00 1.00 1.00	Very limited Large stones Too steep Depth to bedrock	 1.00 1.00 1.00	Very limited Large stones Slope Depth to bedrock	 1.00 1.00 1.00
Bigfork-----	20	Very limited Too steep Large stones	 1.00 1.00	Very limited Large stones Too steep	 1.00 1.00	Very limited Large stones Slope Depth to bedrock	 1.00 1.00 0.86
8: Bigfork-----	65	Very limited Large stones Slope	 1.00 0.04	Very limited Large stones Slope	 1.00 0.04	Very limited Large stones Slope Depth to bedrock Gravel	 1.00 1.00 0.86 0.04
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9: Bigfork-----	45	Very limited Too steep Large stones	 1.00 1.00	Very limited Large stones Too steep	 1.00 1.00	Very limited Large stones Slope Depth to bedrock	 1.00 1.00 0.86
Yanush-----	30	Very limited Too steep Large stones	 1.00 1.00	Very limited Large stones Too steep	 1.00 1.00	Very limited Large stones Slope Gravel	 1.00 1.00 0.17
Rock outcrop-----	15	Not rated		Not rated		Not rated	
10: Billstown-----	85	Very limited Slow water movement	 1.00	Very limited Slow water movement	 1.00	Very limited Slow water movement Slope	 1.00 1.00
11: Billstown-----	90	Very limited Slow water movement Slope	 1.00 0.63	Very limited Slow water movement Slope	 1.00 0.63	Very limited Slope Slow water movement	 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
12:							
Billstown-----	50	Very limited Slow water movement Slope	1.00 0.63	Very limited Slow water movement Slope	1.00 0.63	Very limited Slope Slow water movement	1.00 1.00
Tiak-----	40	Somewhat limited Slow water movement Slope	0.96 0.63	Somewhat limited Slow water movement Slope	0.96 0.63	Very limited Slope Slow water movement	1.00 0.96
13:							
Bonnerdale-----	95	Very limited Depth to saturated zone Slow water movement	1.00 0.96	Very limited Depth to saturated zone Slow water movement	1.00 0.96	Very limited Depth to saturated zone Slope Slow water movement Gravel	1.00 1.00 0.96 0.01
14:							
Carnasaw-----	70	Very limited Large stones Slow water movement Slope	1.00 0.96 0.04	Very limited Large stones Slow water movement Slope	1.00 0.96 0.04	Very limited Large stones Slope Slow water movement	1.00 1.00 0.96
Pirum-----	20	Very limited Large stones Slow water movement Slope	1.00 0.21 0.04	Very limited Large stones Slow water movement Slope	1.00 0.21 0.04	Very limited Large stones Slope Gravel Slow water movement Depth to bedrock	1.00 1.00 0.35 0.21 0.01
15:							
Carnasaw-----	55	Somewhat limited Slow water movement Slope Large stones	0.96 0.63 0.01	Somewhat limited Slow water movement Slope Large stones	0.96 0.63 0.01	Very limited Slope Slow water movement Gravel Large stones	1.00 0.96 0.10 0.01
Sherless-----	35	Somewhat limited Slow water movement Slope Large stones	0.96 0.63 0.02	Somewhat limited Slow water movement Slope Large stones	0.96 0.63 0.02	Very limited Slope Slow water movement Gravel Large stones Depth to bedrock	1.00 0.96 0.14 0.02 0.01
16:							
Carnasaw-----	60	Very limited Too steep Large stones Slow water movement	1.00 1.00 0.96	Very limited Large stones Too steep Slow water movement	1.00 1.00 0.96	Very limited Large stones Slope Slow water movement	1.00 1.00 0.96

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
16: Sherless-----	35	Very limited Too steep Large stones Slow water movement	 1.00 1.00 0.96	Very limited Large stones Too steep Slow water movement	 1.00 1.00 0.96	Very limited Large stones Slope Slow water movement Gravel Depth to bedrock	 1.00 1.00 0.96 0.14 0.01
17: Carnasaw-----	50	Very limited Too steep Large stones Slow water movement	 1.00 1.00 0.96	Very limited Large stones Too steep Slow water movement	 1.00 1.00 0.96	Very limited Large stones Slope Slow water movement	 1.00 1.00 0.96
Sherwood-----	25	Very limited Too steep Large stones	 1.00 1.00	Very limited Large stones Too steep	 1.00 1.00	Very limited Large stones Slope Gravel	 1.00 1.00 0.12
Zafra-----	15	Very limited Too steep Large stones Too sandy	 1.00 1.00 0.01	Very limited Large stones Too steep Too sandy	 1.00 1.00 0.01	Very limited Large stones Slope Depth to bedrock Gravel Too sandy	 1.00 1.00 0.42 0.06 0.01
18: Carnasaw-----	50	Very limited Too steep Large stones Slow water	 1.00 1.00 0.96	Very limited Large stones Too steep Slow water movement	 1.00 1.00 0.96	Very limited Large stones Slope Slow water movement	 1.00 1.00 0.96
Zafra-----	25	Very limited Too steep Large stones Too sandy	 1.00 1.00 0.01	Very limited Large stones Too steep Too sandy	 1.00 1.00 0.01	Very limited Large stones Slope Gravel Depth to bedrock Too sandy	 1.00 1.00 0.01 0.01 0.01
Clebit-----	15	Very limited Too steep Large stones Slow water movement Depth to bedrock	 1.00 1.00 1.00 1.00	Very limited Large stones Too steep Slow water movement Depth to bedrock	 1.00 1.00 1.00 1.00	Very limited Slow water movement Large stones Slope Depth to bedrock Gravel	 1.00 1.00 1.00 1.00 0.96
19: Ceda-----	90	Very limited Flooding Large stones	 1.00 0.68	Somewhat limited Large stones Flooding	 0.68 0.40	Very limited Flooding Large stones	 1.00 0.68
20: Ceda-----	100	Very limited Flooding Large stones	 1.00 0.16	Somewhat limited Flooding Large stones	 0.40 0.16	Very limited Flooding Large stones	 1.00 0.16

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21: Clebit-----	40	Very limited Large stones Slow water movement Depth to bedrock Slope	 1.00 1.00 1.00 0.04	Very limited Large stones Slow water movement Depth to bedrock Slope	 1.00 1.00 1.00 0.04	Very limited Slow water movement Large stones Depth to bedrock Slope Gravel	 1.00 1.00 1.00 1.00 0.40
Carnasaw-----	35	Very limited Large stones Slow water movement Slope	 1.00 0.96 0.04	Very limited Large stones Slow water movement Slope	 1.00 0.96 0.04	Very limited Large stones Slope Slow water movement	 1.00 1.00 0.96
Pirum-----	15	Very limited Large stones Slow water movement Slope	 1.00 0.21 0.04	Very limited Large stones Slow water movement Slope	 1.00 0.21 0.04	Very limited Large stones Slope Slow water movement Depth to bedrock	 1.00 1.00 0.21 0.01
22: Cupco-----	90	Very limited Depth to saturated zone Flooding Slow water movement	 1.00 1.00 0.21	Somewhat limited Depth to saturated zone Slow water movement	 0.94 0.21	Very limited Depth to saturated zone Slow water movement	 1.00 0.21
23: Dam-----	100	Not rated		Not rated		Not rated	
24: Dela-----	95	Very limited Flooding	 1.00	Not limited		Somewhat limited Flooding	 0.60
25: Dela-----	90	Very limited Flooding	 1.00	Somewhat limited Flooding	 0.40	Very limited Flooding	 1.00
26: Delight-----	100	Very limited Too clayey Slow water movement	 1.00 0.21	Very limited Too clayey Slow water movement	 1.00 0.21	Very limited Slope Too clayey Depth to bedrock Slow water movement Gravel	 1.00 1.00 0.42 0.21 0.01
27: Gurdon-----	90	Very limited Flooding Depth to saturated zone	 1.00 0.98	Somewhat limited Depth to saturated zone	 0.75	Somewhat limited Depth to saturated zone Flooding	 0.98 0.60

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
28: Guyton-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	1.00	Slow water movement	0.94	Slow water movement	0.94
		Slow water movement	0.94				
29: Guyton-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	1.00	Slow water movement	0.94	Slow water movement	0.94
		Slow water movement	0.94			Flooding	0.60
30: Guyton-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Slow water movement	0.94	Slow water movement	0.94	Slow water movement	0.94
31: Japany-----	90	Very limited Depth to saturated zone	1.00	Very limited Slow water movement	1.00	Very limited Depth to saturated zone	1.00
		Slow water movement	1.00	Depth to saturated zone	0.96	Slow water movement	1.00
						Slope	0.12
32: Kenn-----	95	Very limited Flooding	1.00	Somewhat limited Gravel	0.32	Very limited Gravel	1.00
		Gravel	0.32				
33: Kenn-----	90	Very limited Flooding	1.00	Somewhat limited Gravel	0.32	Very limited Gravel	1.00
		Gravel	0.32			Flooding	0.60
34: Kenn-----	90	Very limited Flooding	1.00	Somewhat limited Flooding	0.40	Very limited Flooding	1.00
35: Kenn-----	55	Very limited Flooding	1.00	Somewhat limited Flooding	0.40	Very limited Flooding	1.00
						Gravel	0.48
Ceda-----	35	Very limited Flooding	1.00	Somewhat limited Large stones	0.68	Very limited Flooding	1.00
		Large stones	0.68	Flooding	0.40	Large stones	0.68
36: Kizzia-----	90	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Slope	0.88
						Depth to saturated zone	0.39

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
37: Leeper-----	95	Very limited Flooding Slow water movement Depth to saturated zone	 1.00 1.00 0.98	Very limited Slow water movement Depth to saturated zone	 1.00 0.75	Very limited Slow water movement Depth to saturated zone Flooding	 1.00 0.98 0.60
38: Littlefir-----	60	Somewhat limited Slow water movement	 0.96	Somewhat limited Slow water movement	 0.96	Somewhat limited Slow water movement Slope Gravel	 0.96 0.88 0.22
Carnasaw-----	30	Somewhat limited Slow water movement	 0.96	Somewhat limited Slow water movement	 0.96	Somewhat limited Slow water movement Slope Gravel	 0.96 0.88 0.32
39: Magnet-----	100	Very limited Too steep Slow water movement Large stones	 1.00 0.26 0.08	Very limited Too steep Slow water movement Large stones	 1.00 0.26 0.08	Very limited Slope Gravel Depth to bedrock Slow water movement Large stones	 1.00 0.95 0.35 0.26 0.08
40: Marietta-----	95	Very limited Flooding Depth to saturated zone	 1.00 0.77	Somewhat limited Depth to saturated zone	 0.43	Somewhat limited Depth to saturated zone Flooding	 0.77 0.60
41: Mazarn-----	100	Somewhat limited Depth to saturated zone Slow water movement	 0.98 0.21	Somewhat limited Depth to saturated zone Slow water movement	 0.75 0.21	Somewhat limited Depth to saturated zone Slow water movement	 0.98 0.21
42: Mazarn-----	90	Very limited Flooding Depth to saturated zone Slow water movement	 1.00 0.98 0.21	Somewhat limited Depth to saturated zone Slow water movement	 0.75 0.21	Somewhat limited Depth to saturated zone Flooding Slow water movement	 0.98 0.60 0.21
43: McCaskill-----	95	Very limited Depth to saturated zone Flooding Slow water movement	 1.00 1.00 0.21	Somewhat limited Depth to saturated zone Slow water movement	 0.94 0.21	Very limited Depth to saturated zone Slow water movement	 1.00 0.21

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
44: Mena-----	95	Somewhat limited		Somewhat limited		Very limited	
		Slow water	0.21	Slow water	0.21	Gravel	1.00
		movement		movement		Slope	0.50
		Gravel	0.10	Gravel	0.10	Slow water	0.21
						movement	
45: Mena-----	95	Somewhat limited		Somewhat limited		Very limited	
		Slow water	0.21	Slow water	0.21	Slope	1.00
		movement		movement		Gravel	1.00
		Gravel	0.10	Gravel	0.10	Slow water	0.21
		Slope	0.04	Slope	0.04	movement	
46: Mena-----	95	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water	0.21	Slow water	0.21	Slope	0.50
		movement		movement		Slow water	0.21
						movement	
						Gravel	0.11
47: Murfreesboro-----	90	Somewhat limited		Somewhat limited		Very limited	
		Gravel	0.46	Gravel	0.46	Gravel	1.00
						Slope	0.50
48: Murfreesboro-----	90	Not limited		Not limited		Somewhat limited	
						Slope	0.50
						Gravel	0.04
49: Nathan-----	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to	0.39	Depth to	0.19	Slope	0.88
		saturated zone		saturated zone		Depth to	0.39
						saturated zone	
50: Nashoba-----	50	Somewhat limited		Somewhat limited		Very limited	
		Gravel	0.24	Gravel	0.24	Gravel	1.00
		Too sandy	0.01	Too sandy	0.01	Slope	0.88
						Depth to bedrock	0.65
						Too sandy	0.01
Bismarck-----	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Gravel	1.00
		Gravel	0.62	Gravel	0.62	Depth to bedrock	1.00
						Slope	0.88
Littlefir-----	20	Somewhat limited		Somewhat limited		Very limited	
		Slow water	0.96	Slow water	0.96	Gravel	1.00
		movement		movement		Slow water	0.96
		Gravel	0.84	Gravel	0.84	movement	
						Slope	0.88
51: Nashoba-----	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Large stones	0.01	Large stones	0.01	Depth to bedrock	0.65
						Gravel	0.13
						Large stones	0.01

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51:							
Bismarck-----	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to bedrock	1.00
		Large stones	0.16	Large stones	0.16	Large stones	0.16
Littlefir-----	20	Somewhat limited		Somewhat limited		Very limited	
		Slow water	0.96	Slow water	0.96	Slope	1.00
		movement		movement		Slow water	0.96
		Slope	0.63	Slope	0.63	movement	
						Gravel	0.88
52:							
Nashoba-----	50	Very limited		Very limited		Very limited	
		Too steep	1.00	Large stones	1.00	Large stones	1.00
		Large stones	1.00	Too steep	1.00	Slope	1.00
		Too sandy	0.01	Too sandy	0.01	Depth to bedrock	0.65
						Too sandy	0.01
Littlefir-----	25	Very limited		Very limited		Very limited	
		Too steep	1.00	Large stones	1.00	Large stones	1.00
		Large stones	1.00	Too steep	1.00	Slope	1.00
		Slow water	0.96	Slow water	0.96	Slow water	0.96
		movement		movement		movement	
Sherless-----	15	Very limited		Very limited		Very limited	
		Too steep	1.00	Large stones	1.00	Large stones	1.00
		Large stones	1.00	Too steep	1.00	Slope	1.00
		Slow water	0.96	Slow water	0.96	Slow water	0.96
		movement		movement		movement	
						Gravel	0.10
						Depth to bedrock	0.01
53:							
Neff-----	95	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Depth to	0.75	Depth to	0.98
		Depth to	0.98	saturated zone		saturated zone	
		saturated zone		Slow water	0.21	Flooding	0.60
		Slow water	0.21	movement		Slow water	0.21
		movement				movement	
54:							
Ochlockonee-----	95	Very limited		Not limited		Not limited	
		Flooding	1.00				
55:							
Ochlockonee-----	95	Very limited		Not limited		Somewhat limited	
		Flooding	1.00			Flooding	0.60
56:							
Ochlockonee-----	95	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
57:							
Ouachita-----	95	Very limited		Not limited		Not limited	
		Flooding	1.00				
58:							
Ouachita-----	95	Very limited		Not limited		Somewhat limited	
		Flooding	1.00			Flooding	0.60

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
59: Ozan-----	100	Very limited Flooding Depth to saturated zone Too sandy	1.00 0.81 0.01	Somewhat limited Depth to saturated zone Too sandy	0.48 0.01	Somewhat limited Depth to saturated zone Too sandy	0.81 0.01
60: Ozan-----	100	Very limited Flooding Depth to saturated zone Too sandy	1.00 0.81 0.01	Somewhat limited Depth to saturated zone Too sandy	0.48 0.01	Somewhat limited Depth to saturated zone Flooding Too sandy	0.81 0.60 0.01
61: Peanutrock-----	95	Very limited Gravel	1.00	Very limited Gravel	1.00	Very limited Gravel Slope	1.00 1.00
62: Peanutrock-----	95	Very limited Gravel Slope	1.00 0.63	Very limited Gravel Slope	1.00 0.63	Very limited Gravel Slope	1.00 1.00
63: Peanutrock-----	90	Very limited Too steep Gravel	1.00 1.00	Very limited Too steep Gravel	1.00 1.00	Very limited Gravel Slope	1.00 1.00
64: Peanutrock-----	55	Very limited Gravel Slope	1.00 0.63	Very limited Gravel Slope	1.00 0.63	Very limited Gravel Slope	1.00 1.00
Tiak-----	35	Somewhat limited Slow water movement Slope	0.96 0.63	Somewhat limited Slow water movement Slope	0.96 0.63	Very limited Slope Slow water movement	1.00 0.96
65: Pikecity-----	90	Not rated		Not rated		Not rated	
66: Pikecreek-----	100	Very limited Flooding Gravel Too sandy	1.00 0.24 0.13	Somewhat limited Flooding Gravel Too sandy	0.40 0.24 0.13	Very limited Flooding Gravel Too sandy	1.00 1.00 0.13
67: Pirum-----	50	Somewhat limited Slow water movement	0.21	Somewhat limited Slow water movement	0.21	Somewhat limited Slope Gravel Slow water movement Depth to bedrock	0.50 0.22 0.21 0.01

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
67: Sherless-----	30	Very limited Depth to saturated zone Slow water movement	1.00 0.96	Very limited Depth to saturated zone Slow water movement	1.00 0.96	Very limited Depth to saturated zone Slope Slow water movement Gravel Depth to bedrock	1.00 1.00 0.96 0.14 0.01
Bonnerdale-----	20	Very limited Depth to saturated zone Slow water movement	1.00 0.96	Very limited Depth to saturated zone Slow water movement	1.00 0.96	Very limited Depth to saturated zone Slow water movement Slope Gravel	1.00 0.96 0.50 0.01
68: Pits-----	60	Not rated		Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated		Not rated	
69: Riverwash-----	60	Not rated		Not rated		Not rated	
Ceda-----	35	Very limited Flooding Large stones	1.00 0.68	Somewhat limited Large stones Flooding	0.68 0.40	Very limited Flooding Large stones	1.00 0.68
70: Sardis-----	90	Very limited Flooding Depth to saturated zone	1.00 0.07	Somewhat limited Depth to saturated zone	0.03	Somewhat limited Depth to saturated zone	0.07
71: Sardis-----	90	Very limited Flooding Depth to saturated zone	1.00 0.07	Somewhat limited Depth to saturated zone	0.03	Somewhat limited Flooding Depth to saturated zone	0.60 0.07
72: Sherless-----	50	Somewhat limited Slow water movement	0.96	Somewhat limited Slow water movement	0.96	Somewhat limited Slow water movement Gravel Slope Depth to bedrock	0.96 0.93 0.88 0.01
Littlefir-----	40	Somewhat limited Slow water movement Gravel	0.96 0.01	Somewhat limited Slow water movement Gravel	0.96 0.01	Very limited Gravel Slow water movement Slope	1.00 0.96 0.88

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
73:							
Sherless-----	50	Somewhat limited		Somewhat limited		Very limited	
		Slow water	0.96	Slow water	0.96	Slope	1.00
		movement		movement		Slow water	0.96
		Slope	0.63	Slope	0.63	movement	
		Large stones	0.02	Large stones	0.02	Gravel	0.14
						Large stones	0.02
						Depth to bedrock	0.01
Littlefir-----	25	Somewhat limited		Somewhat limited		Very limited	
		Slow water	0.96	Slow water	0.96	Slope	1.00
		movement		movement		Slow water	0.96
		Slope	0.63	Slope	0.63	movement	
		Large stones	0.01	Large stones	0.01	Large stones	0.01
Nashoba-----	15	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Large stones	0.01	Large stones	0.01	Depth to bedrock	0.65
						Gravel	0.13
						Large stones	0.01
74:							
Sherless-----	45	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Slope	1.00
		Slow water	0.96	Slow water	0.96	Slow water	0.96
		movement		movement		movement	
		Large stones	0.02	Large stones	0.02	Gravel	0.14
						Large stones	0.02
						Depth to bedrock	0.01
Littlefir-----	30	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Slope	1.00
		Slow water	0.96	Slow water	0.96	Slow water	0.96
		movement		movement		movement	
		Large stones	0.01	Large stones	0.01	Large stones	0.01
Nashoba-----	15	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Slope	1.00
		Large stones	0.01	Large stones	0.01	Depth to bedrock	0.65
						Large stones	0.01
						Gravel	0.01
75:							
Sherless-----	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water	0.96	Slow water	0.96	Slow water	0.96
		movement		movement		movement	
		Large stones	0.19	Large stones	0.19	Slope	0.88
						Large stones	0.19
						Gravel	0.14
						Depth to bedrock	0.01
Nashoba-----	30	Very limited		Very limited		Very limited	
		Large stones	1.00	Large stones	1.00	Large stones	1.00
						Slope	0.88
						Depth to bedrock	0.65
						Gravel	0.13

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
76: Smithton-----	100	Very limited Depth to saturated zone Slow water movement	1.00 0.21	Very limited Depth to saturated zone Slow water movement	1.00 0.21	Very limited Depth to saturated zone Slow water movement	1.00 0.21
77: Speer-----	95	Very limited Flooding	1.00	Not limited		Somewhat limited Flooding	0.60
78: Speer-----	95	Very limited Flooding	1.00	Not limited		Not limited	
79: Stelltown-----	90	Not limited		Not limited		Somewhat limited Slope	0.50
80: Stelltown-----	90	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Slope	1.00
81, 82: Tiak-----	100	Somewhat limited Slow water movement	0.96	Somewhat limited Slow water movement	0.96	Somewhat limited Slow water movement Slope	0.96 0.88
83: Tiak-----	100	Somewhat limited Slow water movement Slope	0.96 0.63	Somewhat limited Slow water movement Slope	0.96 0.63	Very limited Slope Slow water movement	1.00 0.96
84: Tiak-----	60	Somewhat limited Slow water movement	0.96	Somewhat limited Slow water movement	0.96	Somewhat limited Slow water movement Slope	0.96 0.88
Antoine-----	40	Somewhat limited Slow water movement	0.96	Somewhat limited Slow water movement	0.96	Somewhat limited Slow water movement Slope	0.96 0.50
85: Tiak-----	50	Somewhat limited Slow water movement Slope	0.96 0.63	Somewhat limited Slow water movement Slope	0.96 0.63	Very limited Slope Slow water movement	1.00 0.96
Antoine-----	40	Somewhat limited Slow water movement Slope	0.96 0.16	Somewhat limited Slow water movement Slope	0.96 0.16	Very limited Slope Slow water movement	1.00 0.96
86: Toine-----	95	Very limited Flooding Too sandy	1.00 0.01	Somewhat limited Too sandy	0.01	Somewhat limited Too sandy	0.01

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
87: Toine-----	95	Very limited Flooding Too sandy	1.00 0.01	Somewhat limited Too sandy	0.01	Somewhat limited Flooding Too sandy	0.60 0.01
88: Una-----	100	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60
89: Vaughn-----	90	Very limited Flooding Gravel Too sandy	1.00 0.46 0.01	Somewhat limited Gravel Too sandy	0.46 0.01	Very limited Gravel Flooding Too sandy	1.00 0.60 0.01
90: Vaughn-----	55	Very limited Flooding Gravel Too sandy	1.00 0.46 0.01	Somewhat limited Gravel Flooding Too sandy	0.46 0.40 0.01	Very limited Gravel Flooding Too sandy	1.00 1.00 0.01
Pikecreek-----	35	Very limited Flooding Too sandy Gravel	1.00 0.60 0.24	Somewhat limited Too sandy Flooding Gravel	0.60 0.40 0.24	Very limited Flooding Gravel Too sandy	1.00 1.00 0.60
91: Water-----	100	Not rated		Not rated		Not rated	
92: Wetsaw-----	100	Somewhat limited Slow water movement Depth to saturated zone Too sandy	0.96 0.39 0.01	Somewhat limited Slow water movement Depth to saturated zone Too sandy	0.96 0.19 0.01	Somewhat limited Slow water movement Slope Depth to saturated zone Gravel Too sandy	0.96 0.50 0.39 0.22 0.01
93: Woodall-----	100	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 0.26	Very limited Depth to saturated zone Slow water movement	1.00 0.26	Very limited Depth to saturated zone Flooding Slow water movement	1.00 0.60 0.26
94: Woodall-----	95	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 0.26	Very limited Depth to saturated zone Slow water movement	1.00 0.26	Very limited Depth to saturated zone Flooding Slow water movement	1.00 0.60 0.26

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
95: Yanush-----	90	Very limited Gravel	1.00	Very limited Gravel	1.00	Very limited Gravel Slope	1.00 0.88
96: Yanush-----	90	Very limited Gravel Slope	1.00 0.63	Very limited Gravel Slope	1.00 0.63	Very limited Gravel Slope	1.00 1.00
97: Yanush-----	50	Very limited Too steep Large stones	1.00 0.65	Very limited Too steep Large stones	1.00 0.65	Very limited Slope Large stones Gravel	1.00 0.65 0.13
Avant-----	35	Very limited Too steep Large stones Gravel	1.00 0.16 0.01	Very limited Too steep Large stones Gravel	1.00 0.16 0.01	Very limited Slope Gravel Large stones Depth to bedrock	1.00 1.00 0.16 0.06
Bengal-----	15	Very limited Too steep Slow water movement Large stones	1.00 0.96 0.10	Very limited Too steep Slow water movement Large stones	1.00 0.96 0.10	Very limited Slope Slow water movement Gravel Large stones Depth to bedrock	1.00 0.96 0.20 0.10 0.03
98: Yanush-----	50	Very limited Too steep	1.00	Very limited Too steep	1.00	Very limited Slope Gravel	1.00 0.28
Avant-----	35	Very limited Too steep Large stones Gravel	1.00 0.16 0.01	Very limited Too steep Large stones Gravel	1.00 0.16 0.01	Very limited Slope Gravel Large stones Depth to bedrock	1.00 1.00 0.16 0.06
Bengal-----	15	Very limited Too steep Slow water movement Large stones Gravel	1.00 0.96 0.26 0.03	Very limited Too steep Slow water movement Large stones Gravel	1.00 0.96 0.26 0.03	Very limited Slope Gravel Slow water movement Large stones Depth to bedrock	1.00 1.00 0.96 0.26 0.03
99: Yanush-----	60	Very limited Too steep Large stones Gravel	1.00 1.00 1.00	Very limited Large stones Too steep Gravel	1.00 1.00 1.00	Very limited Large stones Gravel Slope	1.00 1.00 1.00
Bigfork-----	35	Not rated		Not rated		Not rated	

Soil Survey of Pike County, Arkansas

Table 9a.--Recreational Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
100:							
Yanush-----	55	Very limited		Very limited		Very limited	
		Too steep	1.00	Large stones	1.00	Large stones	1.00
		Large stones	1.00	Too steep	1.00	Slope	1.00
						Gravel	0.17
Bigfork-----	30	Not rated		Not rated		Not rated	
101:							
Zafra-----	40	Not rated		Not rated		Not rated	
Carnasaw-----	30	Very limited		Very limited		Very limited	
		Too steep	1.00	Large stones	1.00	Large stones	1.00
		Slow water	0.96	Too steep	1.00	Slope	1.00
		movement		Slow water	0.96	Slow water	0.96
				movement		movement	
						Gravel	0.11
Clebit-----	20	Very limited		Very limited		Very limited	
		Too steep	1.00	Large stones	1.00	Slow water	1.00
		Large stones	1.00	Too steep	1.00	movement	
		Slow water	1.00	Slow water	1.00	Large stones	1.00
		movement		movement		Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
						Gravel	0.40

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.19
2: Avilla-----	90	Not limited		Not limited		Not limited	
3: Avilla-----	90	Not limited		Not limited		Somewhat limited Gravel	0.26
4: Avilla-----	100	Not limited		Not limited		Somewhat limited Slope	0.04
5: Bengal-----	50	Very limited Large stones	1.00	Very limited Large stones	1.00	Somewhat limited Large stones Slope Depth to bedrock	0.68 0.63 0.03
Bismarck-----	20	Very limited Large stones	1.00	Very limited Large stones	1.00	Very limited Depth to bedrock Large stones Droughty Slope	1.00 1.00 0.99 0.63
Yanush-----	20	Very limited Large stones	1.00	Very limited Large stones	1.00	Somewhat limited Large stones Slope	0.79 0.63
6: Bengal-----	50	Very limited Large stones Slope	1.00 1.00	Very limited Large stones	1.00	Very limited Too steep Large stones Depth to bedrock	1.00 0.68 0.03
Bismarck-----	20	Very limited Large stones Slope	1.00 1.00	Very limited Large stones	1.00	Very limited Too steep Depth to bedrock Large stones Droughty	1.00 1.00 1.00 0.99
Yanush-----	20	Very limited Large stones Slope	1.00 1.00	Very limited Large stones	1.00	Very limited Too steep Large stones	1.00 0.79
7: Bengal-----	55	Very limited Large stones Slope	1.00 1.00	Very limited Large stones Slope	1.00 1.00	Very limited Too steep Large stones Depth to bedrock	1.00 1.00 0.03

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7: Bismarck-----	25	Very limited Large stones Slope	1.00 1.00	Very limited Large stones Slope	1.00 1.00	Very limited Too steep Depth to bedrock Large stones Droughty	1.00 1.00 1.00 1.00 0.99
Bigfork-----	20	Very limited Large stones Slope	1.00 1.00	Very limited Large stones Slope	1.00 1.00	Very limited Too steep Large stones Droughty Depth to bedrock	1.00 1.00 1.00 0.95 0.86
8: Bigfork-----	65	Very limited Large stones	1.00	Very limited Large stones	1.00	Very limited Large stones Droughty Depth to bedrock Slope	1.00 0.95 0.86 0.04
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9: Bigfork-----	45	Very limited Large stones Slope	1.00 1.00	Very limited Large stones Slope	1.00 1.00	Very limited Too steep Large stones Droughty Depth to bedrock	1.00 1.00 1.00 0.95 0.86
Yanush-----	30	Very limited Large stones Slope	1.00 1.00	Very limited Large stones Slope	1.00 1.00	Very limited Too steep Large stones	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
10: Billstown-----	85	Not limited		Not limited		Not limited	
11: Billstown-----	90	Very limited Water erosion	1.00	Very limited Water erosion	1.00	Somewhat limited Slope	0.63
12: Billstown-----	50	Very limited Water erosion	1.00	Very limited Water erosion	1.00	Somewhat limited Slope	0.63
Tiak-----	40	Not limited		Not limited		Somewhat limited Slope	0.63
13: Bonnerdale-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
14: Carnasaw-----	70	Very limited Large stones	1.00	Very limited Large stones	1.00	Somewhat limited Large stones Slope	0.99 0.04

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
14: Pirum-----	20	Very limited Large stones	1.00	Very limited Large stones	1.00	Somewhat limited Large stones Slope Depth to bedrock	0.95 0.04 0.01
15: Carnasaw-----	55	Somewhat limited Large stones	0.01	Somewhat limited Large stones	0.01	Somewhat limited Large stones Slope	0.95 0.63
Sherless-----	35	Somewhat limited Large stones	0.02	Somewhat limited Large stones	0.02	Somewhat limited Large stones Slope Depth to bedrock	0.99 0.63 0.01
16: Carnasaw-----	60	Very limited Large stones Slope	1.00 1.00	Very limited Large stones	1.00	Very limited Too steep Large stones	1.00 1.00
Sherless-----	35	Very limited Large stones Slope	1.00 1.00	Very limited Large stones	1.00	Very limited Too steep Large stones Depth to bedrock	1.00 0.99 0.01
17: Carnasaw-----	50	Very limited Large stones Slope	1.00 1.00	Very limited Large stones Slope	1.00 1.00	Very limited Too steep Large stones	1.00 0.99
Sherwood-----	25	Very limited Large stones Slope	1.00 1.00	Very limited Large stones Slope	1.00 1.00	Very limited Too steep Large stones	1.00 0.68
Zafra-----	15	Very limited Large stones Slope Too sandy	1.00 1.00 0.01	Very limited Large stones Slope Too sandy	1.00 1.00 0.01	Very limited Too steep Large stones Depth to bedrock Droughty	1.00 0.99 0.42 0.14
18: Carnasaw-----	50	Very limited Large stones Slope	1.00 1.00	Very limited Large stones	1.00	Very limited Too steep Large stones	1.00 1.00
Zafra-----	25	Very limited Large stones Slope Too sandy	1.00 1.00 0.01	Very limited Large stones Too sandy	1.00 0.01	Very limited Too steep Large stones Depth to bedrock	1.00 0.95 0.01
Clebit-----	15	Very limited Large stones Slope	1.00 1.00	Very limited Large stones	1.00	Very limited Too steep Droughty Depth to bedrock Large stones	1.00 1.00 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
19: Ceda-----	90	Somewhat limited Large stones Flooding	0.68 0.40	Somewhat limited Large stones Flooding	0.68 0.40	Very limited Flooding Large stones Droughty	1.00 1.00 0.09
20: Ceda-----	100	Somewhat limited Flooding Large stones	0.40 0.16	Somewhat limited Flooding Large stones	0.40 0.16	Very limited Flooding Large stones Droughty	1.00 1.00 0.09
21: Clebit-----	40	Very limited Large stones	1.00	Very limited Large stones	1.00	Very limited Large stones Droughty Depth to bedrock Slope	1.00 1.00 1.00 0.04
Carnasaw-----	35	Very limited Large stones	1.00	Very limited Large stones	1.00	Very limited Large stones Slope	1.00 0.04
Pirum-----	15	Very limited Large stones	1.00	Very limited Large stones	1.00	Very limited Large stones Slope Depth to bedrock	1.00 0.04 0.01
22: Cupco-----	90	Somewhat limited Depth to saturated zone	0.86	Somewhat limited Depth to saturated zone	0.86	Somewhat limited Depth to saturated zone	0.94
Woodall-----	10	Not rated		Not rated		Not rated	
23: Dam-----	100	Not rated		Not rated		Not rated	
24: Dela-----	95	Not limited		Not limited		Somewhat limited Flooding	0.60
25: Dela-----	90	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Flooding	1.00
26: Delight-----	100	Very limited Too clayey	1.00	Very limited Too clayey	1.00	Very limited Too clayey Depth to bedrock	1.00 0.42
27: Gurdon-----	90	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Flooding	0.75 0.60
28: Guyton-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29: Guyton-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Flooding	1.00 0.60
30: Guyton-----	100	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
31: Japany-----	90	Somewhat limited Depth to saturated zone	0.92	Somewhat limited Depth to saturated zone	0.92	Somewhat limited Depth to saturated zone	0.96
32: Kenn-----	95	Not limited		Not limited		Somewhat limited Gravel	0.32
33: Kenn-----	90	Not limited		Not limited		Somewhat limited Flooding Gravel	0.60 0.32
34: Kenn-----	90	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Flooding	1.00
35: Kenn-----	55	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Flooding Large stones	1.00 0.74
Ceda-----	35	Somewhat limited Large stones Flooding	0.68 0.40	Somewhat limited Large stones Flooding	0.68 0.40	Very limited Flooding Large stones Droughty	1.00 1.00 0.09
36: Kizzia-----	90	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.19
37: Leeper-----	95	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Flooding	0.75 0.60
38: Littlefir-----	60	Not limited		Not limited		Not limited	
Carnasaw-----	30	Not limited		Not limited		Not limited	
39: Magnet-----	100	Very limited Slope Large stones	1.00 0.08	Somewhat limited Large stones	0.08	Very limited Too steep Large stones Depth to bedrock	1.00 1.00 0.35

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails	Value	Off-road motorcycle trails	Value	Golf fairways	Value
		Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
40: Marietta-----	95	Somewhat limited Depth to saturated zone	0.08	Somewhat limited Depth to saturated zone	0.08	Somewhat limited Flooding Depth to saturated zone	0.60 0.43
41: Mazarn-----	100	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Depth to bedrock	0.75 0.06
42: Mazarn-----	90	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Flooding Depth to bedrock	0.75 0.60 0.06
43: McCaskill-----	95	Somewhat limited Depth to saturated zone	0.86	Somewhat limited Depth to saturated zone	0.86	Somewhat limited Depth to saturated zone	0.94
44: Mena-----	95	Not limited		Not limited		Somewhat limited Gravel	0.10
45: Mena-----	95	Not limited		Not limited		Somewhat limited Gravel Slope	0.10 0.04
46: Mena-----	95	Not limited		Not limited		Not limited	
47: Murfreesboro-----	90	Not limited		Not limited		Somewhat limited Gravel	0.46
48: Murfreesboro-----	90	Not limited		Not limited		Not limited	
49: Nathan-----	90	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.19
50: Nashoba-----	50	Somewhat limited Too sandy	0.01	Somewhat limited Too sandy	0.01	Somewhat limited Droughty Depth to bedrock Gravel Large stones	0.99 0.65 0.24 0.05
Bismarck-----	25	Not limited		Not limited		Very limited Depth to bedrock Droughty Gravel	1.00 0.99 0.62

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
50: Littlefir-----	20	Not limited		Not limited		Somewhat limited Gravel	0.84
51: Nashoba-----	50	Somewhat limited Large stones	0.01	Somewhat limited Large stones	0.01	Somewhat limited Large stones Droughty Depth to bedrock Slope	0.97 0.96 0.65 0.63
Bismarck-----	25	Somewhat limited Large stones	0.16	Somewhat limited Large stones	0.16	Very limited Depth to bedrock Large stones Droughty Slope	1.00 1.00 0.99 0.63
Littlefir-----	20	Not limited		Not limited		Somewhat limited Large stones Slope	0.74 0.63
52: Nashoba-----	50	Very limited Large stones Slope Too sandy	1.00 1.00 0.01	Very limited Large stones Too sandy	1.00 0.01	Very limited Too steep Droughty Large stones Depth to bedrock	1.00 0.99 0.99 0.65
Littlefir-----	25	Very limited Large stones Water erosion Slope	1.00 1.00 0.50	Very limited Large stones Water erosion	1.00 1.00	Very limited Too steep Large stones	1.00 1.00 1.00
Sherless-----	15	Very limited Large stones Water erosion Slope	1.00 1.00 1.00	Very limited Large stones Water erosion	1.00 1.00	Very limited Too steep Large stones Depth to bedrock	1.00 0.95 0.01
53: Neff-----	95	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Flooding	0.75 0.60
54: Ochlockonee-----	95	Not limited		Not limited		Not limited	
55: Ochlockonee-----	95	Not limited		Not limited		Somewhat limited Flooding	0.60
56: Ochlockonee-----	95	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Flooding	1.00
57: Ouachita-----	95	Not limited		Not limited		Not limited	
58: Ouachita-----	95	Not limited		Not limited		Somewhat limited Flooding	0.60

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails	Value	Off-road motorcycle trails	Value	Golf fairways	Value
		Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
59: Ozan-----	100	Somewhat limited Depth to saturated zone Too sandy	0.11 0.01	Somewhat limited Depth to saturated zone Too sandy	0.11 0.01	Somewhat limited Depth to saturated zone	0.48
60: Ozan-----	100	Somewhat limited Depth to saturated zone Too sandy	0.11 0.01	Somewhat limited Depth to saturated zone Too sandy	0.11 0.01	Somewhat limited Flooding Depth to saturated zone	0.60 0.48
61: Peanutrock-----	95	Not limited		Not limited		Very limited Gravel	1.00
62: Peanutrock-----	95	Not limited		Not limited		Very limited Gravel Slope	1.00 0.63
63: Peanutrock-----	90	Very limited Slope	1.00	Not limited		Very limited Too steep Gravel	1.00 1.00
64: Peanutrock-----	55	Not limited		Not limited		Very limited Gravel Slope	1.00 0.63
Tiak-----	35	Not limited		Not limited		Somewhat limited Slope	0.63
65: Pikecity-----	90	Not rated		Not rated		Not rated	
66: Pikecreek-----	100	Somewhat limited Flooding Too sandy	0.40 0.13	Somewhat limited Flooding Too sandy	0.40 0.13	Very limited Flooding Large stones Gravel Droughty	1.00 0.38 0.24 0.09
67: Pirum-----	50	Not limited		Not limited		Somewhat limited Depth to bedrock	0.01
Sherless-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to bedrock	1.00 0.01
Bonnerdale-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
68: Pits-----	60	Not rated		Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated		Not rated	

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
69: Riverwash-----	60	Not rated		Not rated		Not rated	
Ceda-----	35	Somewhat limited Large stones Flooding	0.68 0.40	Somewhat limited Large stones Flooding	0.68 0.40	Very limited Flooding Large stones Droughty	1.00 1.00 0.09
70: Sardis-----	90	Not limited		Not limited		Somewhat limited Depth to saturated zone	0.03
71: Sardis-----	90	Not limited		Not limited		Somewhat limited Flooding Depth to saturated zone	0.60 0.03
72: Sherless-----	50	Not limited		Not limited		Somewhat limited Large stones Depth to bedrock	0.32 0.01
Littlefir-----	40	Not limited		Not limited		Somewhat limited Large stones Gravel	0.20 0.01
73: Sherless-----	50	Somewhat limited Large stones	0.02	Somewhat limited Large stones	0.02	Somewhat limited Large stones Slope Depth to bedrock	0.99 0.63 0.01
Littlefir-----	25	Very limited Water erosion Large stones	1.00 0.01	Very limited Water erosion Large stones	1.00 0.01	Somewhat limited Large stones Slope	0.97 0.63
Nashoba-----	15	Somewhat limited Large stones	0.01	Somewhat limited Large stones	0.01	Somewhat limited Large stones Droughty Depth to bedrock Slope	0.97 0.96 0.65 0.63
74: Sherless-----	45	Somewhat limited Slope Large stones	0.50 0.02	Somewhat limited Large stones	0.02	Very limited Too steep Large stones Depth to bedrock	1.00 0.99 0.01
Littlefir-----	30	Very limited Water erosion Slope Large stones	1.00 0.50 0.01	Very limited Water erosion Large stones	1.00 0.01	Very limited Too steep Large stones	1.00 0.97
Nashoba-----	15	Somewhat limited Slope Large stones	0.50 0.01	Somewhat limited Large stones	0.01	Very limited Too steep Large stones Droughty Depth to bedrock	1.00 0.99 0.98 0.65

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
75: Sherless-----	60	Somewhat limited Large stones	0.19	Somewhat limited Large stones	0.19	Somewhat limited Large stones Depth to bedrock	0.99 0.01
Nashoba-----	30	Very limited Large stones	1.00	Very limited Large stones	1.00	Somewhat limited Large stones Droughty Depth to bedrock	0.97 0.96 0.65
76: Smithton-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
77: Speer-----	95	Not limited		Not limited		Somewhat limited Flooding	0.60
78: Speer-----	95	Not limited		Not limited		Not limited	
79: Stelltown-----	90	Not limited		Not limited		Not limited	
80: Stelltown-----	90	Not limited		Not limited		Somewhat limited Slope	0.04
81: Tiak-----	100	Not limited		Not limited		Not limited	
82: Tiak-----	100	Not limited		Not limited		Not limited	
83: Tiak-----	100	Not limited		Not limited		Somewhat limited Slope	0.63
84: Tiak-----	60	Not limited		Not limited		Not limited	
Antoine-----	40	Not limited		Not limited		Not limited	
85: Tiak-----	50	Not limited		Not limited		Somewhat limited Slope	0.63
Antoine-----	40	Very limited Water erosion	1.00	Very limited Water erosion	1.00	Somewhat limited Slope	0.16
86: Toine-----	95	Somewhat limited Too sandy	0.01	Somewhat limited Too sandy	0.01	Not limited	
87: Toine-----	95	Somewhat limited Too sandy	0.01	Somewhat limited Too sandy	0.01	Somewhat limited Flooding	0.60

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
88: Una-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Flooding	1.00 0.60
89: Vaughn-----	90	Somewhat limited Too sandy	0.01	Somewhat limited Too sandy	0.01	Somewhat limited Flooding Gravel	0.60 0.46
90: Vaughn-----	55	Somewhat limited Flooding Too sandy	0.40 0.01	Somewhat limited Flooding Too sandy	0.40 0.01	Very limited Flooding Gravel	1.00 0.46
Pikecreek-----	35	Somewhat limited Too sandy Flooding	0.60 0.40	Somewhat limited Too sandy Flooding	0.60 0.40	Very limited Flooding Large stones Gravel Droughty	1.00 0.38 0.24 0.09
91: Water-----	100	Not rated		Not rated		Not rated	
92: Wetsaw-----	100	Somewhat limited Too sandy	0.01	Somewhat limited Too sandy	0.01	Somewhat limited Depth to saturated zone	0.19
93: Woodall-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Flooding	1.00 0.60
94: Woodall-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Flooding	1.00 0.60
95: Yanush-----	90	Not limited		Not limited		Very limited Gravel Large stones	1.00 0.01
96: Yanush-----	90	Not limited		Not limited		Very limited Gravel Slope Large stones	1.00 0.63 0.01
97: Yanush-----	50	Very limited Slope Large stones	1.00 0.65	Somewhat limited Large stones	0.65	Very limited Too steep Large stones	1.00 1.00

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
97:							
Avant-----	35	Very limited Slope Large stones	1.00 0.16	Somewhat limited Large stones	0.16	Very limited Too steep Large stones Droughty Depth to bedrock Gravel	1.00 1.00 0.28 0.06 0.01
Bengal-----	15	Very limited Slope Large stones	1.00 0.10	Somewhat limited Large stones	0.10	Very limited Too steep Large stones Depth to bedrock	1.00 1.00 0.03
98:							
Yanush-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Too steep Large stones	1.00 0.79
Avant-----	35	Very limited Slope Large stones	1.00 0.16	Very limited Slope Large stones	1.00 0.16	Very limited Too steep Large stones Droughty Depth to bedrock Gravel	1.00 1.00 0.28 0.06 0.01
Bengal-----	15	Very limited Slope Large stones	1.00 0.26	Very limited Slope Large stones	1.00 0.26	Very limited Too steep Large stones Depth to bedrock Gravel	1.00 1.00 0.03 0.03
99:							
Yanush-----	60	Very limited Large stones Slope	1.00 1.00	Very limited Large stones	1.00	Very limited Too steep Gravel Large stones	1.00 1.00 0.01
Bigfork-----	35	Not rated		Not rated		Very limited Too steep Large stones Droughty Depth to bedrock	1.00 1.00 0.95 0.86
100:							
Yanush-----	55	Very limited Large stones Slope	1.00 1.00	Very limited Large stones Slope	1.00 1.00	Very limited Too steep Large stones	1.00 1.00
Bigfork-----	30	Not rated		Not rated		Very limited Too steep Large stones Droughty Depth to bedrock	1.00 1.00 0.95 0.86

Soil Survey of Pike County, Arkansas

Table 9b.--Recreational Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
101: Zafra-----	40	Not rated		Not rated		Very limited Too steep Large stones Depth to bedrock	 1.00 1.00 0.01
Carnasaw-----	30	Very limited Large stones Slope	 1.00 1.00	Very limited Large stones Slope	 1.00 1.00	Very limited Too steep Large stones	 1.00 0.92
Clebit-----	20	Very limited Large stones Slope	 1.00 1.00	Very limited Large stones Slope	 1.00 1.00	Very limited Too steep Large stones Droughty Depth to bedrock	 1.00 1.00 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Very limited Potentially or highly erodible Depth to saturated zone Peres slowly	1.00 0.75 0.48	Very limited Potentially or highly erodible Depth to saturated zone Peres slowly	1.00 0.75 0.48	Somewhat limited Depth to saturated zone	0.75
2: Avilla-----	90	Very limited Potentially or highly erodible Droughty	1.00 0.01	Very limited Potentially or highly erodible	1.00	Not limited	
3: Avilla-----	90	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Droughty	1.00 0.26 0.01	Very limited Potentially or highly erodible Too gravelly, cobble, or stony	1.00 0.26	Not limited	
4: Avilla-----	100	Very limited Potentially or highly erodible Droughty	1.00 0.01	Very limited Potentially or highly erodible	1.00	Not limited	
5: Bengal-----	50	Very limited Potentially or highly erodible Peres slowly Too gravelly, cobble, or stony Bedrock Droughty	1.00 0.48 0.24 0.03 0.02	Very limited Potentially or highly erodible Peres slowly Too gravelly, cobble, or stony Bedrock	1.00 0.48 0.24 0.03	Somewhat limited Bedrock	0.99
Bismarck-----	20	Very limited Droughty Bedrock Potentially or highly erodible Too gravelly, cobble, or stony	1.00 1.00 1.00 0.92	Very limited Potentially or highly erodible Bedrock Droughty Too gravelly, cobble, or stony	1.00 1.00 0.99 0.92	Somewhat limited Bedrock	0.24
Yanush-----	20	Very limited Potentially or highly erodible Droughty Too gravelly, cobble, or stony	1.00 0.61 0.51	Very limited Potentially or highly erodible Too gravelly, cobble, or stony	1.00 0.51	Not limited	

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6: Bengal-----	50	Very limited Potentially or highly erodible Slope Percs slowly Too gravelly, cobble, or stony Bedrock	 1.00 0.78 0.48 0.24 0.03	Very limited Potentially or highly erodible Slope Percs slowly Too gravelly, cobble, or stony Bedrock	 1.00 0.78 0.48 0.24 0.03	Somewhat limited Bedrock	 0.99
Bismarck-----	20	Very limited Droughty Bedrock Potentially or highly erodible Too gravelly, cobble, or stony Slope	 1.00 1.00 1.00 0.92 0.78	Very limited Potentially or highly erodible Bedrock Droughty Too gravelly, cobble, or stony Slope	 1.00 1.00 0.99 0.92 0.78	Somewhat limited Bedrock	 0.24
Yanush-----	20	Very limited Potentially or highly erodible Slope Droughty Too gravelly, cobble, or stony	 1.00 0.78 0.61 0.51	Very limited Potentially or highly erodible Slope Too gravelly, cobble, or stony	 1.00 0.78 0.51	Not limited	
7: Bengal-----	55	Very limited Slope Potentially or highly erodible Percs slowly Too gravelly, cobble, or stony Bedrock	 1.00 1.00 0.48 0.39 0.03	Very limited Slope Potentially or highly erodible Percs slowly Too gravelly, cobble, or stony Bedrock	 1.00 1.00 0.48 0.39 0.03	Somewhat limited Bedrock	 0.99
Bismarck-----	25	Very limited Droughty Slope Bedrock Potentially or highly erodible Too gravelly, cobble, or stony	 1.00 1.00 1.00 1.00 0.92	Very limited Slope Potentially or highly erodible Bedrock Droughty Too gravelly, cobble, or stony	 1.00 1.00 1.00 0.99 0.92	Somewhat limited Bedrock	 0.24
Bigfork-----	20	Very limited Too gravelly, cobble, or stony Droughty Slope Potentially or highly erodible Bedrock	 1.00 1.00 1.00 1.00 0.86	Very limited Too gravelly, cobble, or stony Slope Potentially or highly erodible Droughty Bedrock	 1.00 1.00 1.00 0.95 0.86	Somewhat limited Bedrock Too gravelly, cobble, or stony	 0.66 0.04

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
8: Bigfork-----	65	Very limited Too gravelly, cobble, or stony Droughty Potentially or highly erodible Bedrock	1.00 1.00 1.00 1.00 0.86	Very limited Too gravelly, cobble, or stony Potentially or highly erodible Droughty Bedrock	1.00 1.00 1.00 0.95 0.86	Somewhat limited Bedrock Too gravelly, cobble, or stony	0.66 0.59
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9: Bigfork-----	45	Very limited Too gravelly, cobble, or stony Droughty Slope Potentially or highly erodible Bedrock	1.00 1.00 1.00 1.00 1.00 0.86	Very limited Too gravelly, cobble, or stony Slope Potentially or highly erodible Droughty Bedrock	1.00 1.00 1.00 1.00 0.95 0.86	Somewhat limited Bedrock Too gravelly, cobble, or stony	0.66 0.35
Yanush-----	30	Very limited Slope Potentially or highly erodible Too gravelly, cobble, or stony Droughty	1.00 1.00 1.00 1.00 1.00 0.61	Very limited Slope Potentially or highly erodible Too gravelly, cobble, or stony	1.00 1.00 1.00 1.00	Somewhat limited Too gravelly, cobble, or stony	0.02
Rock outcrop-----	15	Not rated		Not rated		Not rated	
10: Billstown-----	85	Very limited Potentially or highly erodible Peres slowly	1.00 1.00 0.50	Very limited Potentially or highly erodible Peres slowly	1.00 1.00 0.50	Not limited	
11: Billstown-----	90	Very limited Potentially or highly erodible Peres slowly	1.00 1.00 0.50	Very limited Potentially or highly erodible Peres slowly	1.00 1.00 0.50	Not limited	
12: Billstown-----	50	Very limited Potentially or highly erodible Peres slowly	1.00 1.00 0.50	Very limited Potentially or highly erodible Peres slowly	1.00 1.00 0.50	Not limited	
Tiak-----	40	Very limited Potentially or highly erodible Peres slowly	1.00 1.00 0.48	Very limited Potentially or highly erodible Peres slowly	1.00 1.00 0.48	Not limited	

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
13: Bonnerdale-----	95	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Bedrock	1.00
		saturated zone		saturated zone		Depth to	1.00
		Potentially or	1.00	Potentially or	1.00	saturated zone	
		highly erodible		highly erodible			
		Percs slowly	0.48	Percs slowly	0.48		
		Droughty	0.08				
14: Carnasaw-----	70	Very limited		Very limited		Very limited	
		Potentially or	1.00	Potentially or	1.00	Bedrock	1.00
		highly erodible		highly erodible			
		Percs slowly	0.48	Percs slowly	0.48		
		Too gravelly,	0.46	Too gravelly,	0.46		
		cobbly, or stony		cobbly, or stony			
		Droughty	0.22				
Pirum-----	20	Very limited		Very limited		Somewhat limited	
		Potentially or	1.00	Potentially or	1.00	Bedrock	0.99
		highly erodible		highly erodible			
		Too gravelly,	0.81	Too gravelly,	0.81		
		cobbly, or stony		cobbly, or stony			
		Droughty	0.09	Bedrock	0.01		
		Bedrock	0.01				
15: Carnasaw-----	55	Very limited		Very limited		Very limited	
		Potentially or	1.00	Potentially or	1.00	Bedrock	1.00
		highly erodible		highly erodible			
		Too gravelly,	0.64	Too gravelly,	0.64		
		cobbly, or stony		cobbly, or stony			
		Percs slowly	0.48	Percs slowly	0.48		
		Droughty	0.22				
Sherless-----	35	Very limited		Very limited		Very limited	
		Potentially or	1.00	Potentially or	1.00	Bedrock	0.99
		highly erodible		highly erodible			
		Too gravelly,	0.88	Too gravelly,	0.88		
		cobbly, or stony		cobbly, or stony			
		Percs slowly	0.48	Percs slowly	0.48		
		Droughty	0.04	Bedrock	0.01		
		Bedrock	0.01				
16: Carnasaw-----	60	Very limited		Very limited		Very limited	
		Potentially or	1.00	Potentially or	1.00	Bedrock	1.00
		highly erodible		highly erodible			
		Slope	0.78	Slope	0.78		
		Too gravelly,	0.60	Too gravelly,	0.60		
		cobbly, or stony		cobbly, or stony			
		Percs slowly	0.48	Percs slowly	0.48		
		Droughty	0.22				

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
16: Sherless-----	35	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Slope Percs slowly Droughty	 1.00 0.88 0.78 0.48 0.04	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Slope Percs slowly Bedrock	 1.00 0.88 0.78 0.48 0.01	Very limited Bedrock	 0.99
17: Carnasaw-----	50	Very limited Slope Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly Droughty	 1.00 1.00 0.67 0.48 0.22	Very limited Slope Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly	 1.00 1.00 0.67 0.48	Very limited Bedrock	 1.00
Sherwood-----	25	Very limited Slope Potentially or highly erodible Too gravelly, cobble, or stony Droughty	 1.00 1.00 0.24 0.03	Very limited Slope Potentially or highly erodible Too gravelly, cobble, or stony	 1.00 1.00 0.24	Very limited Bedrock	 1.00
Zafra-----	15	Very limited Slope Potentially or highly erodible Droughty Too gravelly, cobble, or stony Bedrock	 1.00 1.00 1.00 0.82 0.42	Very limited Slope Potentially or highly erodible Too gravelly, cobble, or stony Bedrock Droughty	 1.00 1.00 0.82 0.42 0.13	Somewhat limited Bedrock	 0.87
18: Carnasaw-----	50	Very limited Potentially or highly erodible Slope Too gravelly, cobble, or stony Percs slowly Droughty	 1.00 0.78 0.66 0.48 0.22	Very limited Potentially or highly erodible Slope Too gravelly, cobble, or stony Percs slowly	 1.00 0.78 0.66 0.48	Very limited Bedrock	 1.00
Zafra-----	25	Very limited Potentially or highly erodible Droughty Slope Too gravelly, cobble, or stony Bedrock	 1.00 0.99 0.78 0.47 0.01	Very limited Potentially or highly erodible Slope Too gravelly, cobble, or stony Bedrock	 1.00 0.78 0.47 0.01	Somewhat limited Bedrock	 0.99

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
18: Clebit-----	15	Very limited		Very limited		Somewhat limited	
		Droughty	1.00	Droughty	1.00	Droughty	0.50
		Percs slowly	1.00	Potentially or	1.00	Bedrock	0.36
		Bedrock	1.00	highly erodible		Too gravelly,	0.03
		Potentially or	1.00	Percs slowly	1.00	cobbly, or stony	
		highly erodible		Bedrock	1.00		
		Too gravelly,	1.00	Too gravelly,	1.00		
		cobbly, or stony		cobbly, or stony			
19: Ceda-----	90	Very limited		Very limited		Somewhat limited	
		Too gravelly,	1.00	Too gravelly,	1.00	Too gravelly,	0.02
		cobbly, or stony		cobbly, or stony		cobbly, or stony	
		Droughty	1.00	Flooding	0.50		
		Flooding	0.50	Droughty	0.08		
20: Ceda-----	100	Very limited		Somewhat limited		Not limited	
		Droughty	1.00	Too gravelly,	0.61		
		Too gravelly,	0.61	cobbly, or stony			
		cobbly, or stony		Flooding	0.50		
		Flooding	0.50	Droughty	0.08		
21: Clebit-----	40	Very limited		Very limited		Somewhat limited	
		Too gravelly,	1.00	Too gravelly,	1.00	Too gravelly,	0.84
		cobbly, or stony		cobbly, or stony		cobbly, or stony	
		Droughty	1.00	Droughty	1.00	Droughty	0.50
		Percs slowly	1.00	Potentially or	1.00	Bedrock	0.36
		Bedrock	1.00	highly erodible	1.00		
		Potentially or	1.00	Percs slowly	1.00		
		highly erodible		Bedrock	1.00		
Carnasaw-----	35	Very limited		Very limited		Very limited	
		Potentially or	1.00	Potentially or	1.00	Bedrock	1.00
		highly erodible		highly erodible		Too gravelly,	0.23
		Too gravelly,	1.00	Too gravelly,	1.00	cobbly, or stony	
		cobbly, or stony		cobbly, or stony			
		Percs slowly	0.48	Percs slowly	0.48		
		Droughty	0.31				
Pirum-----	15	Very limited		Very limited		Somewhat limited	
		Potentially or	1.00	Potentially or	1.00	Bedrock	0.99
		highly erodible		highly erodible			
		Too gravelly,	0.83	Too gravelly,	0.83		
		cobbly, or stony		cobbly, or stony			
		Droughty	0.10	Bedrock	0.01		
		Bedrock	0.01				
22: Cupco-----	90	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Potentially or	1.00	Potentially or	1.00		
		highly erodible		highly erodible			
23: Dam-----	100	Not rated		Not rated		Not rated	

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
24: Dela-----	95	Somewhat limited Flooding Droughty	0.50 0.32	Somewhat limited Flooding	0.50	Not limited	
25: Dela-----	90	Somewhat limited Flooding Droughty	0.50 0.32	Somewhat limited Flooding	0.50	Not limited	
26: Delight-----	100	Very limited Too clayey Potentially or highly erodible Droughty Bedrock	1.00 1.00 0.57 0.42	Very limited Potentially or highly erodible Too clayey Bedrock	1.00 1.00 0.42	Somewhat limited Bedrock Too clayey	0.87 0.50
27: Gurdon-----	90	Very limited Depth to saturated zone Flooding	0.99 0.50	Very limited Depth to saturated zone Flooding	0.99 0.50	Very limited Depth to saturated zone	0.99
28: Guyton-----	100	Very limited Depth to saturated zone Peres slowly	1.00 0.33	Very limited Depth to saturated zone Peres slowly	1.00 0.33	Very limited Depth to saturated zone	1.00
29: Guyton-----	100	Very limited Flooding Depth to saturated zone Peres slowly	1.00 1.00 0.33	Very limited Flooding Depth to saturated zone Peres slowly	1.00 1.00 0.33	Very limited Depth to saturated zone	1.00
30: Guyton-----	100	Very limited Ponding Depth to saturated zone Peres slowly	1.00 1.00 0.33	Very limited Ponding Depth to saturated zone Peres slowly	1.00 1.00 0.33	Very limited Depth to saturated zone	1.00
31: Japany-----	90	Very limited Depth to saturated zone Potentially or highly erodible Peres slowly Too clayey	1.00 1.00 0.50 0.05	Very limited Depth to saturated zone Potentially or highly erodible Peres slowly Too clayey	1.00 1.00 0.50 0.05	Very limited Depth to saturated zone	1.00
32: Kenn-----	95	Very limited Potentially or highly erodible Droughty Too gravelly, cobbly, or stony	1.00 0.94 0.32	Very limited Potentially or highly erodible Too gravelly, cobbly, or stony	1.00 0.32	Not limited	

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
33: Kenn-----	90	Very limited Potentially or highly erodible Droughty Flooding Too gravelly, cobbly, or stony	1.00 0.94 0.50 0.32	Very limited Potentially or highly erodible Flooding Too gravelly, cobbly, or stony	1.00 0.50 0.32	Not limited	
34: Kenn-----	90	Somewhat limited Droughty Flooding	0.94 0.50	Somewhat limited Flooding	0.50	Not limited	
35: Kenn-----	55	Very limited Potentially or highly erodible Droughty Too gravelly, cobbly, or stony Flooding	1.00 0.94 0.57 0.50	Very limited Potentially or highly erodible Too gravelly, cobbly, or stony Flooding	1.00 0.57 0.50	Not limited	
Ceda-----	35	Very limited Potentially or highly erodible Too gravelly, cobbly, or stony Droughty Flooding	1.00 1.00 1.00 0.50	Very limited Potentially or highly erodible Too gravelly, cobbly, or stony Flooding Droughty	1.00 1.00 0.50 0.08	Somewhat limited Too gravelly, cobbly, or stony	0.02
36: Kizzia-----	90	Very limited Potentially or highly erodible Depth to saturated zone Droughty	1.00 0.75 0.68	Very limited Potentially or highly erodible Depth to saturated zone	1.00 0.75	Somewhat limited Depth to saturated zone	0.75
37: Leeper-----	95	Very limited Potentially or highly erodible Depth to saturated zone Flooding Percs slowly Too clayey	1.00 0.99 0.50 0.50 0.50	Very limited Potentially or highly erodible Depth to saturated zone Flooding Percs slowly Too clayey	1.00 0.99 0.50 0.50 0.50	Very limited Depth to saturated zone	0.99
38: Littlefir-----	60	Very limited Potentially or highly erodible Percs slowly Droughty	1.00 0.48 0.09	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Very limited Bedrock	1.00

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
38: Carnasaw-----	30	Very limited Potentially or highly erodible Percs slowly Droughty	1.00 0.48 0.20	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Very limited Bedrock	1.00
39: Magnet-----	100	Very limited Potentially or highly erodible Too gravelly, cobbly, or stony Slope Droughty Bedrock	1.00 1.00 0.78 0.67 0.35	Very limited Potentially or highly erodible Too gravelly, cobbly, or stony Slope Bedrock	1.00 1.00 0.78 0.35	Somewhat limited Bedrock Too gravelly, cobbly, or stony	0.89 0.05
40: Marietta-----	95	Somewhat limited Depth to saturated zone Flooding	0.92 0.50	Somewhat limited Depth to saturated zone Flooding	0.92 0.50	Somewhat limited Depth to saturated zone	0.92
41: Mazarn-----	100	Very limited Potentially or highly erodible Depth to saturated zone Bedrock	1.00 0.99 0.06	Very limited Potentially or highly erodible Depth to saturated zone Bedrock	1.00 0.99 0.06	Very limited Depth to saturated zone Bedrock	0.99 0.98
42: Mazarn-----	90	Very limited Potentially or highly erodible Depth to saturated zone Flooding Bedrock	1.00 0.99 0.50 0.06	Very limited Potentially or highly erodible Depth to saturated zone Flooding Bedrock	1.00 0.99 0.50 0.06	Very limited Depth to saturated zone Bedrock	0.99 0.98
43: McCaskill-----	95	Very limited Depth to saturated zone Potentially or highly erodible Droughty	1.00 1.00 0.01	Very limited Depth to saturated zone Potentially or highly erodible	1.00 1.00	Very limited Depth to saturated zone	1.00
44, 45: Mena-----	95	Very limited Potentially or highly erodible Too gravelly, cobbly, or stony Depth to saturated zone	1.00 0.30 0.19	Very limited Potentially or highly erodible Too gravelly, cobbly, or stony Depth to saturated zone	1.00 0.30 0.19	Somewhat limited Depth to saturated zone	0.19

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
46: Mena-----	95	Very limited Potentially or highly erodible Depth to saturated zone	1.00 0.19	Very limited Potentially or highly erodible Depth to saturated zone	1.00 0.19	Somewhat limited Depth to saturated zone	0.19
47: Murfreesboro-----	90	Somewhat limited Too gravelly, cobbly, or stony Droughty	0.46 0.08	Somewhat limited Too gravelly, cobbly, or stony	0.46	Not limited	
48: Murfreesboro-----	90	Somewhat limited Droughty	0.08	Not limited		Not limited	
49: Nathan-----	90	Very limited Potentially or highly erodible Depth to saturated zone	1.00 0.75	Very limited Potentially or highly erodible Depth to saturated zone	1.00 0.75	Somewhat limited Depth to saturated zone	0.75
50: Nashoba-----	50	Very limited Droughty Potentially or highly erodible Too gravelly, cobbly, or stony Bedrock	1.00 1.00 0.83 0.65	Very limited Potentially or highly erodible Droughty Too gravelly, cobbly, or stony Bedrock	1.00 0.99 0.83 0.65	Somewhat limited Bedrock	0.79
Bismarck-----	25	Very limited Droughty Bedrock Potentially or highly erodible Too gravelly, cobbly, or stony	1.00 1.00 1.00 0.75	Very limited Potentially or highly erodible Bedrock Droughty Too gravelly, cobbly, or stony	1.00 1.00 0.99 0.75	Somewhat limited Bedrock	0.24
Littlefir-----	20	Very limited Potentially or highly erodible Too gravelly, cobbly, or stony Peres slowly Droughty	1.00 0.84 0.48 0.08	Very limited Potentially or highly erodible Too gravelly, cobbly, or stony Peres slowly	1.00 0.84 0.48	Very limited Bedrock	1.00
51: Nashoba-----	50	Very limited Droughty Potentially or highly erodible Too gravelly, cobbly, or stony Bedrock	1.00 1.00 0.73 0.65	Very limited Potentially or highly erodible Droughty Too gravelly, cobbly, or stony Bedrock	1.00 0.96 0.73 0.65	Somewhat limited Bedrock	0.79

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51: Bismarck-----	25	Very limited Droughty Bedrock Potentially or highly erodible Too gravelly, cobble, or stony	 1.00 1.00 1.00 0.92	Very limited Potentially or highly erodible Bedrock Droughty Too gravelly, cobble, or stony	 1.00 1.00 0.99 0.92	Somewhat limited Bedrock	 0.24
Littlefir-----	20	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly Droughty	 1.00 0.81 0.48 0.08	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly	 1.00 0.81 0.48	Very limited Bedrock	 1.00
52: Nashoba-----	50	Very limited Droughty Potentially or highly erodible Slope Bedrock Too gravelly, cobble, or stony	 1.00 1.00 0.78 0.65 0.49	Very limited Potentially or highly erodible Droughty Slope Bedrock Too gravelly, cobble, or stony	 1.00 0.99 0.78 0.65 0.49	Somewhat limited Bedrock	 0.79
Littlefir-----	25	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly Slope Droughty	 1.00 0.66 0.48 0.22 0.06	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly Slope	 1.00 0.66 0.48 0.22	Very limited Bedrock	 1.00
Sherless-----	15	Very limited Potentially or highly erodible Slope Too gravelly, cobble, or stony Percs slowly Bedrock	 1.00 0.78 0.64 0.48 0.01	Very limited Potentially or highly erodible Slope Too gravelly, cobble, or stony Percs slowly Bedrock	 1.00 0.78 0.64 0.48 0.01	Very limited Bedrock	 0.99
53: Neff-----	95	Very limited Potentially or highly erodible Depth to saturated zone Flooding	 1.00 0.99 0.50	Very limited Potentially or highly erodible Depth to saturated zone Flooding	 1.00 0.99 0.50	Very limited Depth to saturated zone	 0.99
54: Ochlockonee-----	95	Very limited Potentially or highly erodible Droughty	 1.00 0.02	Very limited Potentially or highly erodible	 1.00	Not limited	

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
55, 56: Ochlockonee-----	95	Very limited Potentially or highly erodible Flooding Droughty	1.00 0.50 0.02	Very limited Potentially or highly erodible Flooding	1.00 0.50	Not limited	
57: Ouachita-----	95	Very limited Potentially or highly erodible	1.00	Very limited Potentially or highly erodible	1.00	Not limited	
58: Ouachita-----	95	Very limited Potentially or highly erodible Flooding	1.00 0.50	Very limited Potentially or highly erodible Flooding	1.00 0.50	Not limited	
59: Ozan-----	100	Very limited Potentially or highly erodible Depth to saturated zone	1.00 0.94	Very limited Potentially or highly erodible Depth to saturated zone	1.00 0.94	Somewhat limited Depth to saturated zone	0.94
60: Ozan-----	100	Very limited Potentially or highly erodible Depth to saturated zone Flooding	1.00 0.94 0.50	Very limited Potentially or highly erodible Depth to saturated zone Flooding	1.00 0.94 0.50	Somewhat limited Depth to saturated zone	0.94
61, 62: Peanutrock-----	95	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Droughty	1.00 1.00 0.97	Very limited Potentially or highly erodible Too gravelly, cobble, or stony	1.00 1.00	Somewhat limited Too gravelly, cobble, or stony	0.06
63: Peanutrock-----	90	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Droughty Slope	1.00 1.00 0.97 0.78	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Slope	1.00 1.00 0.78	Somewhat limited Too gravelly, cobble, or stony	0.06
64: Peanutrock-----	55	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Droughty	1.00 1.00 0.97	Very limited Potentially or highly erodible Too gravelly, cobble, or stony	1.00 1.00	Somewhat limited Too gravelly, cobble, or stony	0.06

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
64: Tiak-----	35	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Not limited	
65: Pikecity-----	90	Very limited Potentially or highly erodible Droughty	1.00 0.70	Very limited Potentially or highly erodible	1.00	Not limited	
66: Pikecreek-----	100	Very limited Droughty Too gravelly, cobbly, or stony Flooding Too sandy	1.00 0.99 0.50 0.50	Very limited Too gravelly, cobbly, or stony Too sandy Flooding Droughty	0.99 0.50 0.50 0.08	Somewhat limited Sandy surface	0.40
67: Pirum-----	50	Very limited Potentially or highly erodible Droughty Bedrock	1.00 0.09 0.01	Very limited Potentially or highly erodible Bedrock	1.00 0.01	Somewhat limited Bedrock	0.99
Sherless-----	30	Very limited Depth to saturated zone Potentially or highly erodible Percs slowly Droughty Bedrock	1.00 1.00 0.48 0.04 0.01	Very limited Depth to saturated zone Potentially or highly erodible Percs slowly Bedrock	1.00 1.00 0.48 0.01	Very limited Depth to saturated zone Bedrock	1.00 0.99
Bonnerdale-----	20	Very limited Depth to saturated zone Potentially or highly erodible Percs slowly Droughty	1.00 1.00 0.48 0.08	Very limited Depth to saturated zone Potentially or highly erodible Percs slowly	1.00 1.00 0.48	Very limited Bedrock Depth to saturated zone	1.00 1.00
68: Pits-----	60	Not rated		Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated		Not rated	
69: Riverwash-----	60	Not rated		Not rated		Not rated	
Ceda-----	35	Very limited Too gravelly, cobbly, or stony Droughty Flooding	1.00 1.00 0.50	Very limited Too gravelly, cobbly, or stony Flooding Droughty	1.00 0.50 0.08	Somewhat limited Too gravelly, cobbly, or stony	0.02

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
70: Sardis-----	90	Very limited Potentially or highly erodible Depth to saturated zone	1.00 0.44	Very limited Potentially or highly erodible Depth to saturated zone	1.00 0.44	Somewhat limited Depth to saturated zone	0.44
71: Sardis-----	90	Very limited Potentially or highly erodible Flooding Depth to saturated zone	1.00 0.50 0.44	Very limited Potentially or highly erodible Flooding Depth to saturated zone	1.00 0.50 0.44	Somewhat limited Depth to saturated zone	0.44
72: Sherless-----	50	Very limited Potentially or highly erodible Percs slowly Too gravelly, cobble, or stony Droughty Bedrock	1.00 0.48 0.47 0.04 0.01	Very limited Potentially or highly erodible Percs slowly Too gravelly, cobble, or stony Bedrock	1.00 0.48 0.47 0.01	Very limited Bedrock	0.99
Littlefir-----	40	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly Droughty	1.00 0.68 0.48 0.06	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly	1.00 0.68 0.48	Very limited Bedrock	1.00
73: Sherless-----	50	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly Droughty Bedrock	1.00 0.88 0.48 0.04 0.01	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly Bedrock	1.00 0.88 0.48 0.01	Very limited Bedrock	0.99
Littlefir-----	25	Very limited Potentially or highly erodible Percs slowly Too gravelly, cobble, or stony Droughty	1.00 0.48 0.42 0.06	Very limited Potentially or highly erodible Percs slowly Too gravelly, cobble, or stony	1.00 0.48 0.42	Very limited Bedrock	1.00
Nashoba-----	15	Very limited Droughty Potentially or highly erodible Too gravelly, cobble, or stony Bedrock	1.00 1.00 0.73 0.65	Very limited Potentially or highly erodible Droughty Too gravelly, cobble, or stony Bedrock	1.00 0.96 0.73 0.65	Somewhat limited Bedrock	0.79

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
74: Sherless-----	45	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly Slope Droughty	1.00 0.88 0.48 0.22 0.04	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly Slope Bedrock	1.00 0.88 0.48 0.22 0.01	Very limited Bedrock	0.99
Littlefir-----	30	Very limited Potentially or highly erodible Percs slowly Too gravelly, cobble, or stony Slope Droughty	1.00 0.48 0.42 0.22 0.06	Very limited Potentially or highly erodible Percs slowly Too gravelly, cobble, or stony Slope	1.00 0.48 0.42 0.22	Very limited Bedrock	1.00
Nashoba-----	15	Very limited Droughty Potentially or highly erodible Too gravelly, cobble, or stony Bedrock Slope	1.00 1.00 0.66 0.65 0.22	Very limited Potentially or highly erodible Droughty Too gravelly, cobble, or stony Bedrock Slope	1.00 0.98 0.66 0.65 0.22	Somewhat limited Bedrock	0.79
75: Sherless-----	60	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly Droughty Bedrock	1.00 0.88 0.48 0.04 0.01	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Percs slowly Bedrock	1.00 0.88 0.48 0.01	Very limited Bedrock	0.99
Nashoba-----	30	Very limited Droughty Potentially or highly erodible Too gravelly, cobble, or stony Bedrock	1.00 1.00 0.73 0.65	Very limited Potentially or highly erodible Droughty Too gravelly, cobble, or stony Bedrock	1.00 0.96 0.73 0.65	Somewhat limited Bedrock	0.79
76: Smithton-----	100	Very limited Depth to saturated zone Potentially or highly erodible	1.00 1.00	Very limited Depth to saturated zone Potentially or highly erodible	1.00 1.00	Very limited Depth to saturated zone	1.00
77: Speer-----	95	Very limited Potentially or highly erodible Flooding	1.00 0.50	Very limited Potentially or highly erodible Flooding	1.00 0.50	Not limited	

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
78: Speer-----	95	Very limited Potentially or highly erodible	1.00	Very limited Potentially or highly erodible	1.00	Not limited	
79, 80: Stelltown-----	90	Very limited Potentially or highly erodible Depth to saturated zone Droughty	1.00 0.19 0.09	Very limited Potentially or highly erodible Depth to saturated zone	1.00 0.19	Somewhat limited Depth to saturated zone	0.19
81: Tiak-----	100	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Not limited	
82: Tiak-----	100	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Not limited	
83: Tiak-----	100	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Not limited	
84: Tiak-----	60	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Not limited	
Antoine-----	40	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Not limited	
85: Tiak-----	50	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Not limited	
Antoine-----	40	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Very limited Potentially or highly erodible Percs slowly	1.00 0.48	Not limited	
86: Toine-----	95	Very limited Potentially or highly erodible Droughty	1.00 0.32	Very limited Potentially or highly erodible	1.00	Not limited	

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
87: Toine-----	95	Very limited Potentially or highly erodible Flooding Droughty	1.00 0.50 0.32	Very limited Potentially or highly erodible Flooding	1.00 0.50	Not limited	
88: Una-----	100	Very limited Depth to saturated zone Percs slowly Potentially or highly erodible Flooding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Potentially or highly erodible Percs slowly Flooding Too clayey	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone	1.00
89: Vaughn-----	90	Somewhat limited Droughty Flooding Too gravelly, cobble, or stony	0.68 0.50 0.46	Somewhat limited Flooding Too gravelly, cobble, or stony	0.50 0.46	Not limited	
90: Vaughn-----	55	Very limited Potentially or highly erodible Droughty Flooding Too gravelly, cobble, or stony	1.00 0.68 0.50 0.46	Very limited Potentially or highly erodible Flooding Too gravelly, cobble, or stony	1.00 0.50 0.46	Not limited	
Pikecreek-----	35	Very limited Potentially or highly erodible Droughty Too gravelly, cobble, or stony Flooding Too sandy	1.00 1.00 0.99 0.50 0.50	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Too sandy Flooding Droughty	1.00 0.99 0.50 0.50 0.08	Somewhat limited Sandy surface	0.40
91: Water-----	100	Not rated		Not rated		Not rated	
92: Wetsaw-----	100	Very limited Potentially or highly erodible Depth to saturated zone Percs slowly Droughty	1.00 0.75 0.48 0.45	Very limited Potentially or highly erodible Depth to saturated zone Percs slowly	1.00 0.75 0.48	Somewhat limited Depth to saturated zone	0.75
93: Woodall-----	100	Very limited Depth to saturated zone Flooding	1.00 0.50	Very limited Depth to saturated zone Flooding	1.00 0.50	Very limited Depth to saturated zone	1.00

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
94: Woodall-----	95	Very limited Depth to saturated zone Flooding	1.00 0.50	Very limited Depth to saturated zone Flooding	1.00 0.50	Very limited Depth to saturated zone	1.00
95, 96: Yanush-----	90	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Droughty	1.00 1.00 0.61	Very limited Potentially or highly erodible Too gravelly, cobble, or stony	1.00 1.00	Somewhat limited Too gravelly, cobble, or stony	0.19
97: Yanush-----	50	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Slope Droughty	1.00 1.00 0.78 0.61	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Slope	1.00 1.00 0.78	Somewhat limited Too gravelly, cobble, or stony	0.25
Avant-----	35	Very limited Potentially or highly erodible Droughty Too gravelly, cobble, or stony Slope Bedrock	1.00 1.00 1.00 0.78 0.06	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Slope Droughty Bedrock	1.00 1.00 0.78 0.26 0.06	Somewhat limited Bedrock Too gravelly, cobble, or stony	0.98 0.19
Bengal-----	15	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Slope Percs slowly Droughty	1.00 1.00 0.78 0.48 0.06	Very limited Potentially or highly erodible Too gravelly, cobble, or stony Slope Percs slowly Bedrock	1.00 1.00 0.78 0.48 0.03	Somewhat limited Bedrock Too gravelly, cobble, or stony	0.99 0.01
98: Yanush-----	50	Very limited Slope Potentially or highly erodible Droughty Too gravelly, cobble, or stony	1.00 1.00 0.61 0.51	Very limited Slope Potentially or highly erodible Too gravelly, cobble, or stony	1.00 1.00 0.51	Not limited	
Avant-----	35	Very limited Slope Potentially or highly erodible Droughty Too gravelly, cobble, or stony Bedrock	1.00 1.00 1.00 1.00 0.06	Very limited Slope Potentially or highly erodible Too gravelly, cobble, or stony Droughty Bedrock	1.00 1.00 1.00 0.26 0.06	Somewhat limited Bedrock	0.98

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
98: Bengal-----	15	Very limited Slope Potentially or highly erodible Too gravelly, cobbly, or stony Percs slowly Bedrock	 1.00 1.00 1.00 0.48 0.03	Very limited Slope Potentially or highly erodible Too gravelly, cobbly, or stony Percs slowly Bedrock	 1.00 1.00 1.00 0.48 0.03	Somewhat limited Bedrock Too gravelly, cobbly, or stony	 0.99 0.35
99: Yanush-----	60	Very limited Potentially or highly erodible Too gravelly, cobbly, or stony Slope Droughty	 1.00 1.00 0.78 0.61	Very limited Potentially or highly erodible Too gravelly, cobbly, or stony Slope	 1.00 1.00 0.78	Somewhat limited Too gravelly, cobbly, or stony	0.19
Bigfork-----	35	Very limited Too gravelly, cobbly, or stony Droughty Potentially or highly erodible Bedrock Slope	 1.00 1.00 1.00 0.86 0.78	Very limited Too gravelly, cobbly, or stony Potentially or highly erodible Droughty Bedrock Slope	 1.00 1.00 0.95 0.86 0.78	Somewhat limited Bedrock Too gravelly, cobbly, or stony	0.66 0.32
100: Yanush-----	55	Very limited Slope Potentially or highly erodible Too gravelly, cobbly, or stony Droughty	 1.00 1.00 1.00 0.61	Very limited Slope Potentially or highly erodible Too gravelly, cobbly, or stony	 1.00 1.00 1.00	Somewhat limited Too gravelly, cobbly, or stony	0.02
Bigfork-----	30	Very limited Droughty Slope Potentially or highly erodible Too gravelly, cobbly, or stony Bedrock	 1.00 1.00 1.00 0.95 0.86	Very limited Slope Potentially or highly erodible Droughty Too gravelly, cobbly, or stony Bedrock	 1.00 1.00 0.95 0.95 0.86	Somewhat limited Bedrock	0.66
101: Zafra-----	40	Very limited Slope Potentially or highly erodible Too gravelly, cobbly, or stony Droughty Bedrock	 1.00 1.00 1.00 0.99 0.01	Very limited Slope Potentially or highly erodible Too gravelly, cobbly, or stony Bedrock	 1.00 1.00 1.00 0.01	Somewhat limited Bedrock Too gravelly, cobbly, or stony	0.99 0.12

Soil Survey of Pike County, Arkansas

Table 10a.--Wildlife Habitat (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Grain and seed crops for food and cover		Domestic grasses and legumes for food and cover		Upland shrubs and vines	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
101: Carnasaw-----	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Bedrock	1.00
		Potentially or highly erodible	1.00	Potentially or highly erodible	1.00		
		Too gravelly, cobble, or stony	0.58	Too gravelly, cobble, or stony	0.58		
		Percs slowly	0.48	Percs slowly	0.48		
		Droughty	0.22				
Clebit-----	20	Very limited		Very limited		Somewhat limited	
		Too gravelly, cobble, or stony	1.00	Too gravelly, cobble, or stony	1.00	Too gravelly, cobble, or stony	0.84
		Droughty	1.00	Droughty	1.00	Droughty	0.50
		Slope	1.00	Slope	1.00	Bedrock	0.36
		Percs slowly	1.00	Potentially or highly erodible	1.00		
		Bedrock	1.00	Percs slowly	1.00		

Soil Survey of Pike County, Arkansas

Table 10b.--Wildlife Habitat (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Upland deciduous trees		Upland coniferous trees		Upland mixed deciduous and coniferous trees	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.86	Very limited Depth to saturated zone Growing season wetness	1.00
2, 3: Avilla-----	90	Not limited		Not limited		Not limited	
4: Avilla-----	100	Not limited		Not limited		Not limited	
5, 6: Bengal-----	50	Somewhat limited Bedrock	0.03	Somewhat limited Bedrock	0.03	Somewhat limited Bedrock	0.03
Bismarck-----	20	Very limited Bedrock Droughty	1.00 0.99	Very limited Bedrock Droughty	1.00 0.99	Very limited Bedrock Droughty	1.00 0.99
Yanush-----	20	Not limited		Not limited		Not limited	
7: Bengal-----	55	Somewhat limited Bedrock	0.03	Somewhat limited Bedrock	0.03	Somewhat limited Bedrock	0.03
Bismarck-----	25	Very limited Bedrock Droughty	1.00 0.99	Very limited Bedrock Droughty	1.00 0.99	Very limited Bedrock Droughty	1.00 0.99
Bigfork-----	20	Somewhat limited Droughty Bedrock	0.95 0.86	Somewhat limited Droughty Bedrock	0.95 0.86	Somewhat limited Droughty Bedrock	0.95 0.86
8: Bigfork-----	65	Somewhat limited Droughty Bedrock	0.95 0.86	Somewhat limited Droughty Bedrock	0.95 0.86	Somewhat limited Droughty Bedrock	0.95 0.86
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9: Bigfork-----	45	Somewhat limited Droughty Bedrock	0.95 0.86	Somewhat limited Droughty Bedrock	0.95 0.86	Somewhat limited Droughty Bedrock	0.95 0.86
Yanush-----	30	Not limited		Not limited		Not limited	
Rock outcrop-----	15	Not rated		Not rated		Not rated	
10: Billstown-----	85	Not limited		Not limited		Not limited	
11: Billstown-----	90	Not limited		Not limited		Not limited	

Soil Survey of Pike County, Arkansas

Table 10b.--Wildlife Habitat (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Upland deciduous trees		Upland coniferous trees		Upland mixed deciduous and coniferous trees	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
12: Billstown-----	50	Not limited		Not limited		Not limited	
Tiak-----	40	Somewhat limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.09	Very limited Growing season wetness Depth to saturated zone	1.00 0.99
13: Bonnerdale-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Growing season wetness	1.00 1.00
14: Carnasaw-----	70	Not limited		Not limited		Not limited	
Pirum-----	20	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01
15: Carnasaw-----	55	Not limited		Not limited		Not limited	
Sherless-----	35	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01
16: Carnasaw-----	60	Not limited		Not limited		Not limited	
Sherless-----	35	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01
17: Carnasaw-----	50	Not limited		Not limited		Not limited	
Sherwood-----	25	Not limited		Not limited		Not limited	
Zafra-----	15	Somewhat limited Bedrock Droughty	0.42 0.13	Somewhat limited Bedrock Droughty	0.42 0.13	Somewhat limited Bedrock Droughty	0.42 0.13
18: Carnasaw-----	50	Not limited		Not limited		Not limited	
Zafra-----	25	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01
Clebit-----	15	Very limited Droughty Bedrock	1.00 1.00	Very limited Bedrock Droughty	1.00 1.00	Very limited Bedrock Droughty	1.00 1.00
19: Ceda-----	90	Somewhat limited Droughty	0.08	Somewhat limited Droughty	0.08	Somewhat limited Droughty	0.08
20: Ceda-----	100	Somewhat limited Droughty	0.08	Somewhat limited Droughty	0.08	Somewhat limited Droughty	0.08

Soil Survey of Pike County, Arkansas

Table 10b.--Wildlife Habitat (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Upland deciduous trees		Upland coniferous trees		Upland mixed deciduous and coniferous trees	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21: Clebit-----	40	Very limited Droughty Bedrock	1.00 1.00	Very limited Bedrock Droughty	1.00 1.00	Very limited Bedrock Droughty	1.00 1.00
Carnasaw-----	35	Not limited		Not limited		Not limited	
Pirum-----	15	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01
22: Cupco-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Growing season wetness	1.00 1.00
23: Dam-----	100	Not rated		Not rated		Not rated	
24: Dela-----	95	Somewhat limited Depth to saturated zone	0.44	Not limited		Very limited Growing season wetness Depth to saturated zone	1.00 0.44
25: Dela-----	90	Somewhat limited Depth to saturated zone	0.44	Not limited		Very limited Growing season wetness Depth to saturated zone	1.00 0.44
26: Delight-----	100	Somewhat limited Bedrock	0.42	Somewhat limited Bedrock	0.42	Somewhat limited Bedrock	0.42
27: Gurdon-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Growing season wetness	1.00 1.00
28, 29, 30: Guyton-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Growing season wetness	1.00 1.00
31: Japany-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Growing season wetness	1.00 0.50
32: Kenn-----	95	Not limited		Not limited		Not limited	

Soil Survey of Pike County, Arkansas

Table 10b.--Wildlife Habitat (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Upland deciduous trees		Upland coniferous trees		Upland mixed deciduous and coniferous trees	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
33: Kenn-----	90	Not limited		Not limited		Not limited	
34: Kenn-----	90	Not limited		Not limited		Not limited	
35: Kenn-----	55	Not limited		Not limited		Not limited	
Ceda-----	35	Somewhat limited Droughty	0.08	Somewhat limited Droughty	0.08	Somewhat limited Droughty	0.08
36: Kizzia-----	90	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.86	Very limited Depth to saturated zone Growing season wetness	1.00 1.00
37: Leeper-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Growing season wetness	1.00 0.50
38: Littlefir-----	60	Not limited		Not limited		Not limited	
Carnasaw-----	30	Not limited		Not limited		Not limited	
39: Magnet-----	100	Somewhat limited Bedrock	0.35	Somewhat limited Bedrock	0.35	Somewhat limited Bedrock	0.35
40: Marietta-----	95	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.95	Very limited Depth to saturated zone Growing season wetness	1.00 0.50
41: Mazarn-----	100	Very limited Depth to saturated zone Bedrock	1.00 0.06	Very limited Depth to saturated zone Bedrock	0.99 0.06	Very limited Depth to saturated zone Growing season wetness Bedrock	1.00 1.00 0.06
42: Mazarn-----	90	Very limited Depth to saturated zone Bedrock	1.00 0.06	Very limited Depth to saturated zone Bedrock	0.99 0.06	Very limited Depth to saturated zone Growing season wetness Bedrock	1.00 1.00 0.06

Soil Survey of Pike County, Arkansas

Table 10b.--Wildlife Habitat (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Upland deciduous trees		Upland coniferous trees		Upland mixed deciduous and coniferous trees	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
43: McCaskill-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Growing season wetness	1.00
44, 45, 46: Mena-----	95	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.47	Very limited Depth to saturated zone Growing season wetness	1.00
47, 48: Murfreesboro-----	90	Not limited		Not limited		Not limited	
49: Nathan-----	90	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.86	Very limited Depth to saturated zone	1.00
50: Nashoba-----	50	Somewhat limited Droughty Bedrock	0.99 0.65	Somewhat limited Droughty Bedrock	0.99 0.65	Somewhat limited Droughty Bedrock	0.99 0.65
Bismarck-----	25	Very limited Bedrock Droughty	1.00 0.99	Very limited Bedrock Droughty	1.00 0.99	Very limited Bedrock Droughty	1.00 0.99
Littlefir-----	20	Not limited		Not limited		Not limited	
51: Nashoba-----	50	Somewhat limited Droughty Bedrock	0.96 0.65	Somewhat limited Droughty Bedrock	0.96 0.65	Somewhat limited Droughty Bedrock	0.96 0.65
Bismarck-----	25	Very limited Bedrock Droughty	1.00 0.99	Very limited Bedrock Droughty	1.00 0.99	Very limited Bedrock Droughty	1.00 0.99
Littlefir-----	20	Not limited		Not limited		Not limited	
52: Nashoba-----	50	Somewhat limited Droughty Bedrock	0.99 0.65	Somewhat limited Droughty Bedrock	0.99 0.65	Somewhat limited Droughty Bedrock	0.99 0.65
Littlefir-----	25	Not limited		Not limited		Not limited	
Sherless-----	15	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01
53: Neff-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	0.99	Very limited Depth to saturated zone Growing season wetness	1.00

Soil Survey of Pike County, Arkansas

Table 10b.--Wildlife Habitat (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Upland deciduous trees		Upland coniferous trees		Upland mixed deciduous and coniferous trees	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
54, 55: Ochlockonee-----	95	Somewhat limited Depth to saturated zone	0.44	Not limited		Very limited Growing season wetness Depth to saturated zone	1.00 0.44
56: Ochlockonee-----	95	Not limited		Not limited		Not limited	
57, 58: Ouachita-----	95	Not limited		Not limited		Not limited	
59, 60: Ozan-----	100	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.96	Very limited Depth to saturated zone Growing season wetness	1.00 1.00
61, 62: Peanutrock-----	95	Not limited		Not limited		Not limited	
62: Peanutrock-----	95	Not limited		Not limited		Not limited	
63: Peanutrock-----	90	Not limited		Not limited		Not limited	
64: Peanutrock-----	55	Not limited		Not limited		Not limited	
Tiak-----	35	Not limited		Not limited		Not limited	
65: Pikecity-----	90	Not limited		Not limited		Not limited	
66: Pikecreek-----	100	Somewhat limited Droughty	0.08	Somewhat limited Droughty	0.08	Somewhat limited Droughty	0.08
67: Pirum-----	50	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01
Sherless-----	30	Very limited Depth to saturated zone Bedrock	1.00 0.01	Very limited Depth to saturated zone Bedrock	1.00 0.01	Very limited Depth to saturated zone Growing season wetness Bedrock	1.00 1.00 0.01
Bonnerdale-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Growing season wetness	1.00 1.00

Soil Survey of Pike County, Arkansas

Table 10b.--Wildlife Habitat (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Upland deciduous trees		Upland coniferous trees		Upland mixed deciduous and coniferous trees	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
68:							
Pits-----	60	Not rated		Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated		Not rated	
69:							
Riverwash-----	60	Not rated		Not rated		Not rated	
Ceda-----	35	Somewhat limited Droughty	0.08	Somewhat limited Droughty	0.08	Somewhat limited Droughty	0.08
70, 71:							
Sardis-----	90	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.68	Very limited Depth to saturated zone Growing season wetness	1.00 1.00
72:							
Sherless-----	50	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01
Littlefir-----	40	Not limited		Not limited		Not limited	
73:							
Sherless-----	50	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01
Littlefir-----	25	Not limited		Not limited		Not limited	
Nashoba-----	15	Somewhat limited Droughty Bedrock	0.96 0.65	Somewhat limited Droughty Bedrock	0.96 0.65	Somewhat limited Droughty Bedrock	0.96 0.65
74:							
Sherless-----	45	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01
Littlefir-----	30	Not limited		Not limited		Not limited	
Nashoba-----	15	Somewhat limited Droughty Bedrock	0.98 0.65	Somewhat limited Droughty Bedrock	0.98 0.65	Somewhat limited Droughty Bedrock	0.98 0.65
75:							
Sherless-----	60	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01
Nashoba-----	30	Somewhat limited Droughty Bedrock	0.96 0.65	Somewhat limited Droughty Bedrock	0.96 0.65	Somewhat limited Droughty Bedrock	0.96 0.65
76:							
Smithton-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Growing season wetness	1.00 1.00

Soil Survey of Pike County, Arkansas

Table 10b.--Wildlife Habitat (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Upland deciduous trees		Upland coniferous trees		Upland mixed deciduous and coniferous trees	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
77, 78: Speer-----	95	Not limited		Not limited		Not limited	
79, 80: Stelltown-----	90	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.47	Very limited Depth to saturated zone Growing season wetness	1.00 0.50
81, 82, 83: Tiak-----	100	Somewhat limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.09	Very limited Growing season wetness Depth to saturated zone	1.00 0.99
84: Tiak-----	60	Somewhat limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.09	Very limited Growing season wetness Depth to saturated zone	1.00 0.99
Antoine-----	40	Not limited		Not limited		Not limited	
85: Tiak-----	50	Somewhat limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.09	Very limited Growing season wetness Depth to saturated zone	1.00 0.99
Antoine-----	40	Not limited		Not limited		Not limited	
86, 87: Toine-----	95	Not limited		Not limited		Not limited	
88: Una-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Growing season wetness	1.00 1.00
89: Vaughn-----	90	Not limited		Not limited		Not limited	
90: Vaughn-----	55	Not limited		Not limited		Not limited	
Pikecreek-----	35	Somewhat limited Droughty	0.08	Somewhat limited Droughty	0.08	Somewhat limited Droughty	0.08
91: Water-----	100	Not rated		Not rated		Not rated	

Soil Survey of Pike County, Arkansas

Table 10b.--Wildlife Habitat (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Upland deciduous trees		Upland coniferous trees		Upland mixed deciduous and coniferous trees	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
92: Wetsaw-----	100	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.86	Very limited Depth to saturated zone Growing season wetness	1.00
93: Woodall-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Growing season wetness	1.00
94: Woodall-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Growing season wetness	1.00
95, 96: Yanush-----	90	Not limited		Not limited		Not limited	
97, 98: Yanush-----	50	Not limited		Not limited		Not limited	
Avant-----	35	Somewhat limited Droughty Bedrock	0.26 0.06	Somewhat limited Droughty Bedrock	0.26 0.06	Somewhat limited Droughty Bedrock	0.26 0.06
Bengal-----	15	Somewhat limited Bedrock	0.03	Somewhat limited Bedrock	0.03	Somewhat limited Bedrock	0.03
99: Yanush-----	60	Not limited		Not limited		Not limited	
Bigfork-----	35	Somewhat limited Droughty Bedrock	0.95 0.86	Somewhat limited Droughty Bedrock	0.95 0.86	Somewhat limited Droughty Bedrock	0.95 0.86
100: Yanush-----	55	Not limited		Not limited		Not limited	
Bigfork-----	30	Somewhat limited Droughty Bedrock	0.95 0.86	Somewhat limited Droughty Bedrock	0.95 0.86	Somewhat limited Droughty Bedrock	0.95 0.86
101: Zafra-----	40	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01	Somewhat limited Bedrock	0.01
Carnasaw-----	30	Not limited		Not limited		Not limited	
Clebit-----	20	Very limited Droughty Bedrock	1.00 1.00	Very limited Bedrock Droughty	1.00 1.00	Very limited Bedrock Droughty	1.00 1.00

Table 10c.--Wildlife Habitat (Part 3)

[The information in this table indicates the dominant soil condition but does not eliminate the need for on-site soil sampling. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. The numbers in the rating columns range from 1 to 5. The larger the rating, the greater the limitation. The numbers in the limiting features columns range from 1 to 5. The larger the number, the greater the limitation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. The numbers in the rating columns range from 1 to 5. The larger the rating, the greater the limitation. The numbers in the limiting features columns range from 1 to 5. The larger the number, the greater the limitation.]

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Very limited Infrequent flooding Too dry	1.00 0.53	Not limited		Somewhat limited Too acid Too dry	0.92 0.52
2, 3: Avilla-----	90	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
4: Avilla-----	100	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
5, 6: Bengal-----	50	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Bismarck-----	20	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry Droughty	1.00 0.99	Very limited Too dry Too acid	1.00 0.44
Yanush-----	20	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.44

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7: Bengal-----	55	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Bismarck-----	25	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry Droughty	1.00 0.99	Very limited Too dry Too acid	1.00 0.44
Bigfork-----	20	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 0.16	Very limited Too dry Droughty	1.00 0.95	Very limited Too dry Too acid	1.00 0.44
8: Bigfork-----	65	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 1.00	Very limited Too dry Droughty	1.00 0.95	Very limited Too dry Too acid	1.00 0.44
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9: Bigfork-----	45	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 0.95	Very limited Too dry Droughty	1.00 0.95	Very limited Too dry Too acid	1.00 0.44
Yanush-----	30	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 0.06	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.44

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
9: Rock outcrop-----	15	Not rated		Not rated		Not rated	
10: Billstown-----	85	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.86
11: Billstown-----	90	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.86
12: Billstown-----	50	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.86
Tiak-----	40	Very limited Too dry Infrequent flooding	1.00 1.00	Somewhat limited Too dry	0.01	Very limited Too dry Too acid	1.00 0.96
13: Bonnerdale-----	95	Very limited Infrequent flooding	1.00	Not limited		Somewhat limited Too acid	0.99
14: Carnasaw-----	70	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Pirum-----	20	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
15: Carnasaw-----	55	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Sherless-----	35	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.99
16: Carnasaw-----	60	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Sherless-----	35	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.99
17: Carnasaw-----	50	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Sherwood-----	25	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Zafra-----	15	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry Droughty	1.00 0.13	Very limited Too dry Too acid	1.00 0.92

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
18: Carnasaw-----	50	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Zafra-----	25	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.92
Clebit-----	15	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 0.11	Very limited Too dry Droughty	1.00	Very limited Too dry Too acid	1.00 0.22
19: Ceda-----	90	Very limited Too dry Too gravelly, cobbly, or stony	1.00 0.08	Very limited Too dry Droughty	1.00 0.08	Very limited Too dry	1.00
20: Ceda-----	100	Very limited Too dry	1.00	Very limited Too dry Droughty	1.00 0.08	Very limited Too dry	1.00
21: Clebit-----	40	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 1.00	Very limited Too dry Droughty	1.00 1.00	Very limited Too dry Too acid	1.00 0.22
Carnasaw-----	35	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 0.79	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21: Pirum-----	15	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
22: Cupco-----	90	Very limited Infrequent flooding Too dry	1.00 0.04	Not limited		Somewhat limited Too acid Too dry	0.22 0.04
23: Dam-----	100	Not rated		Not rated		Not rated	
24: Dela-----	95	Very limited Too dry Infrequent flooding	1.00 1.00	Somewhat limited Too dry	0.56	Very limited Too dry	1.00
25: Dela-----	90	Very limited Too dry	1.00	Somewhat limited Too dry	0.56	Very limited Too dry	1.00
26: Delight-----	100	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry	1.00
27: Gurdun-----	90	Very limited Infrequent flooding Too dry	1.00 0.14	Not limited		Somewhat limited Too acid Too dry	0.44 0.14
28: Guyton-----	100	Very limited Infrequent flooding Long flooding	1.00 0.50	Not limited		Somewhat limited Too acid	0.14

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29: Guyton-----	100	Very limited Infrequent flooding Long flooding	1.00 0.50	Somewhat limited Flooding	0.50	Somewhat limited Too acid	0.14
30: Guyton-----	100	Very limited Ponding Infrequent flooding	1.00 1.00	Very limited Ponding	1.00	Somewhat limited Ponding Too acid	0.50 0.14
31: Japany-----	90	Very limited Infrequent flooding Too dry	1.00 0.02	Not limited		Somewhat limited Too acid Too dry	0.22 0.02
32: Kenn-----	95	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
33: Kenn-----	90	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
34: Kenn-----	90	Very limited Too dry	1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
35: Kenn-----	55	Very limited Too dry	1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
35: Ceda-----	35	Very limited Too dry	1.00	Very limited Too dry	1.00	Very limited Too dry	1.00
		Too gravelly, cobbly, or stony	0.08	Droughty	0.08		
36: Kizzia-----	90	Very limited Infrequent flooding Too dry	1.00	Not limited		Somewhat limited Too acid Too dry	0.68 0.53
37: Leeper-----	95	Very limited Infrequent flooding Too dry	1.00	Not limited		Somewhat limited Too dry	0.14
38: Littlefir-----	60	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Carnasaw-----	30	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
39: Magnet-----	100	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 0.19	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.22
40: Marietta-----	95	Very limited Infrequent flooding Too dry	1.00 0.32	Not limited		Somewhat limited Too dry	0.32

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features
41: Mazarn-----	100	Very limited Infrequent flooding Too dry	1.00 0.14	Not limited		Somewhat limited Too acid Too dry
42: Mazarn-----	90	Very limited Infrequent flooding Too dry	1.00 0.14	Not limited		Somewhat limited Too acid Too dry
43: McCaskill-----	95	Very limited Infrequent flooding Too dry	1.00 0.04	Not limited		Very limited Too acid Too dry
44: Mena-----	95	Very limited Infrequent flooding Too dry	1.00 0.89	Not limited		Somewhat limited Too acid Too dry
45: Mena-----	95	Very limited Infrequent flooding Too dry	1.00 0.89	Not limited		Somewhat limited Too acid Too dry
46: Mena-----	95	Very limited Infrequent flooding Too dry	1.00 0.89	Not limited		Somewhat limited Too acid Too dry
47, 48: Murfreesboro-----	90	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
49: Nathan-----	90	Very limited Infrequent flooding Too dry	1.00 0.53	Not limited		Somewhat limited Too acid Too dry	0.96 0.53
50: Nashoba-----	50	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry Droughty	1.00 0.99	Very limited Too dry Too acid	1.00 0.44
Bismarck-----	25	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry Droughty	1.00 0.99	Very limited Too dry Too acid	1.00 0.44
Littlefir-----	20	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
51: Nashoba-----	50	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry Droughty	1.00 0.96	Very limited Too dry Too acid	1.00 0.44
Bismarck-----	25	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry Droughty	1.00 0.99	Very limited Too dry Too acid	1.00 0.44
Littlefir-----	20	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
52: Nashoba-----	50	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry Droughty	1.00 0.99	Very limited Too dry Too acid	1.00 0.44
Littlefir-----	25	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Sherless-----	15	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.99
53: Neff-----	95	Very limited Infrequent flooding Too dry	1.00 0.14	Not limited		Somewhat limited Too acid Too dry	0.44 0.14
54, 55: Ochlockonee-----	95	Very limited Too dry Infrequent flooding	1.00 1.00	Somewhat limited Too dry	0.56	Very limited Too dry Too acid	1.00 0.78
56: Ochlockonee-----	95	Very limited Too dry	1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
57, 58: Ouachita-----	95	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.44

Table 10c.--Wildlife Habitat (Part 3) --Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants			
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value		
59, 60: Ozan-----	100	Very limited		Not limited		Somewhat limited			
		Infrequent flooding	1.00					Too acid	0.44
		Too dry	0.29					Too dry	0.29
61: Peanutrock-----	95	Very limited		Very limited	1.00	Very limited			
		Too dry	1.00					Too dry	1.00
		Infrequent flooding	1.00					Too acid	0.78
		Too gravelly, cobbley, or stony	0.26						
62: Peanutrock-----	95	Very limited		Very limited	1.00	Very limited			
		Too dry	1.00					Too dry	1.00
		Infrequent flooding	1.00					Too acid	0.78
		Too gravelly, cobbley, or stony	0.26						
63: Peanutrock-----	90	Very limited		Very limited	1.00	Very limited			
		Too dry	1.00					Too dry	1.00
		Infrequent flooding	1.00					Too acid	0.78
		Too gravelly, cobbley, or stony	0.26						
64: Peanutrock-----	55	Very limited		Very limited	1.00	Very limited			
		Too dry	1.00					Too dry	1.00
		Infrequent flooding	1.00					Too acid	0.78
		Too gravelly, cobbley, or stony	0.26						
Tiak-----	35	Very limited		Very limited	1.00	Very limited			
		Too dry	1.00					Too dry	1.00
		Infrequent flooding	1.00					Too acid	0.78
		Too gravelly, cobbley, or stony	0.26						

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
65: Pikecity-----	90	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
66: Pikecreek-----	100	Very limited Too dry Too sandy	1.00 0.50	Very limited Too dry Droughty	1.00 0.08	Very limited Too dry	1.00
67: Pirum-----	50	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Sherless-----	30	Very limited Infrequent flooding	1.00	Not limited		Somewhat limited Too acid	0.99
Bonnerdale-----	20	Very limited Infrequent flooding	1.00	Not limited		Somewhat limited Too acid	0.99
68: Pits-----	60	Not rated		Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated		Not rated	
69: Riverwash-----	60	Not rated		Not rated		Not rated	
Ceda-----	35	Very limited Too dry Too gravelly, cobbly, or stony	1.00 0.08	Very limited Too dry Droughty	1.00 0.08	Very limited Too dry	1.00

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
70, 71: Sardis-----	90	Very limited Infrequent flooding	1.00	Not limited		Somewhat limited Too dry	0.76
		Too dry	0.76			Too acid	0.44
72: Sherless-----	50	Very limited Too dry	1.00	Very limited Too dry	1.00	Very limited Too dry	1.00
		Infrequent flooding	1.00			Too acid	0.99
Littlefir-----	40	Very limited Too dry	1.00	Very limited Too dry	1.00	Very limited Too dry	1.00
		Infrequent flooding	1.00			Too acid	0.78
73: Sherless-----	50	Very limited Too dry	1.00	Very limited Too dry	1.00	Very limited Too dry	1.00
		Infrequent flooding	1.00			Too acid	0.99
Littlefir-----	25	Very limited Too dry	1.00	Very limited Too dry	1.00	Very limited Too dry	1.00
		Infrequent flooding	1.00			Too acid	0.78
Nashoba-----	15	Very limited Too dry	1.00	Very limited Too dry	1.00	Very limited Too dry	1.00
		Infrequent flooding	1.00	Droughty	0.96	Too acid	0.44
74: Sherless-----	45	Very limited Too dry	1.00	Very limited Too dry	1.00	Very limited Too dry	1.00
		Infrequent flooding	1.00			Too acid	0.99

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
74: Littlefir-----	30	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Nashoba-----	15	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry Droughty	1.00 0.98	Very limited Too dry Too acid	1.00 0.44
75: Sherless-----	60	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.99
Nashoba-----	30	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry Droughty	1.00 0.96	Very limited Too dry Too acid	1.00 0.44
76: Smithton-----	100	Very limited Infrequent flooding	1.00	Not limited		Somewhat limited Too acid	0.78
77, 78: Speer-----	95	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.44
79: Stelltown-----	90	Very limited Infrequent flooding Too dry	1.00 0.89	Not limited		Very limited Too acid Too dry	1.00 0.89

Table 10c.--Wildlife Habitat (Part 3) --Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
80: Stelltown-----	90	Very limited Infrequent flooding Too dry	1.00 0.89	Not limited		Very limited Too acid Too dry	1.00 0.89
81, 82, 83: Tiak-----	100	Very limited Too dry Infrequent flooding	1.00 1.00	Somewhat limited Too dry	0.01	Very limited Too dry Too acid	1.00 0.96
84: Tiak-----	60	Very limited Too dry Infrequent flooding		Somewhat limited Too dry		Very limited Too dry Too acid	
Antoine-----	40	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.92
85: Tiak-----	50	Very limited Too dry Infrequent flooding		Somewhat limited Too dry		Very limited Too dry Too acid	
Antoine-----	40	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.96
86, 87: Toine-----	95	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.92

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
88: Una-----	100	Very limited Infrequent flooding Long flooding	1.00 0.50	Somewhat limited Flooding	0.50	Somewhat limited Too acid	0.78
89: Vaughn-----	90	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.96
90: Vaughn-----	55	Very limited Too dry	1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.96
Pikecreek-----	35	Very limited Too dry Too sandy	1.00 0.50	Very limited Too dry Droughty	1.00 0.08	Very limited Too dry	1.00
91: Water-----	100	Not rated		Not rated		Not rated	
92: Wetsaw-----	100	Very limited Infrequent flooding Too dry	1.00 0.53	Not limited		Somewhat limited Too acid Too dry	0.78 0.53
93: Woodall-----	100	Very limited Infrequent flooding	1.00	Not limited		Somewhat limited Too acid	0.78
94: Woodall-----	95	Very limited Infrequent flooding	1.00	Not limited		Somewhat limited Too acid	0.78

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
95: Yanush-----	90	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 0.69	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.44
96: Yanush-----	90	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 0.69	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.44
97: Yanush-----	50	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 0.83	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.44
Avant-----	35	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 0.69	Very limited Too dry Droughty	1.00 0.26	Very limited Too dry Too acid	1.00 0.44
Bengal-----	15	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 0.01	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
98: Yanush-----	50	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.44

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
98: Avant-----	35	Very limited					
		Too dry	1.00	Very limited		Very limited	
		Infrequent flooding	1.00	Too dry	1.00	Too dry	1.00
		Too gravelly, cobbley, or stony	0.69	Droughty	0.26	Too acid	0.44
Bengal-----	15	Very limited					
		Too dry	1.00	Very limited		Very limited	
		Infrequent flooding	1.00	Too dry	1.00	Too dry	1.00
		Too gravelly, cobbley, or stony	0.95			Too acid	0.78
99: Yanush-----	60	Very limited					
		Too dry	1.00	Very limited		Very limited	
		Infrequent flooding	1.00	Too dry	1.00	Too dry	1.00
		Too gravelly, cobbley, or stony	0.69			Too acid	0.44
Bigfork-----	35	Very limited					
		Too dry	1.00	Very limited		Very limited	
		Infrequent flooding	1.00	Too dry	1.00	Too dry	1.00
		Too gravelly, cobbley, or stony	0.92	Droughty	0.95	Too acid	0.44
100: Yanush-----	55	Very limited					
		Too dry	1.00	Very limited		Very limited	
		Infrequent flooding	1.00	Too dry	1.00	Too dry	1.00
		Too gravelly, cobbley, or stony	0.06			Too acid	0.44
Bigfork-----	30	Very limited					
		Too dry	1.00	Very limited		Very limited	
		Infrequent flooding	1.00	Droughty	1.00	Too dry	1.00
					0.95	Too acid	0.44

Table 10c.--Wildlife Habitat (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
101: Zafra-----	40	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 0.47	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.92
Carnasaw-----	30	Very limited Too dry Infrequent flooding	1.00 1.00	Very limited Too dry	1.00	Very limited Too dry Too acid	1.00 0.78
Clebit-----	20	Very limited Too dry Infrequent flooding Too gravelly, cobbly, or stony	1.00 1.00 1.00	Very limited Too dry Droughty	1.00 1.00	Very limited Too dry Too acid	1.00 0.22

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Somewhat limited Shrink-swell Depth to saturated zone	0.50 0.39	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Somewhat limited Shrink-swell Depth to saturated zone	0.50 0.39
2, 3: Avilla-----	90	Not limited		Not limited		Not limited	
4: Avilla-----	100	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Slope	1.00
5: Bengal-----	50	Very limited Shrink-swell Slope	1.00 0.63	Very limited Shrink-swell Slope Depth to soft bedrock	1.00 0.63 0.03	Very limited Slope Shrink-swell	1.00 1.00
Bismarck-----	20	Somewhat limited Slope Depth to soft bedrock Large stones	0.63 0.50 0.42	Very limited Depth to soft bedrock Slope Large stones	1.00 0.63 0.42	Very limited Slope Depth to soft bedrock Large stones	1.00 1.00 0.42
Yanush-----	20	Somewhat limited Slope	0.63	Somewhat limited Slope Shrink-swell	0.63 0.50	Very limited Slope	1.00
6: Bengal-----	50	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Shrink-swell Depth to soft bedrock	1.00 1.00 0.03	Very limited Slope Shrink-swell	1.00 1.00
Bismarck-----	20	Very limited Too steep Depth to soft bedrock Large stones	1.00 0.50 0.42	Very limited Too steep Depth to soft bedrock Large stones	1.00 1.00 0.42	Very limited Slope Depth to soft bedrock Large stones	1.00 1.00 0.42
Yanush-----	20	Very limited Too steep	1.00	Very limited Too steep Shrink-swell	1.00 0.50	Very limited Slope	1.00
7: Bengal-----	55	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Shrink-swell Depth to soft bedrock	1.00 1.00 0.03	Very limited Slope Shrink-swell	1.00 1.00

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7:							
Bismarck-----	25	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Slope	1.00
		Depth to soft bedrock	0.50	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Large stones	0.42	Large stones	0.42	Large stones	0.42
Bigfork-----	20	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Slope	1.00
		Large stones	0.88	Depth to hard bedrock	1.00	Large stones	0.88
		Depth to hard bedrock	0.86	Large stones	0.88	Depth to hard bedrock	0.86
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
8:							
Bigfork-----	65	Somewhat limited		Very limited		Very limited	
		Large stones	0.91	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.86	Large stones	0.91	Large stones	0.91
		Shrink-swell	0.50	Shrink-swell	0.50	Depth to hard bedrock	0.86
		Slope	0.04	Slope	0.04	Shrink-swell	0.50
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9:							
Bigfork-----	45	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Slope	1.00
		Large stones	0.94	Depth to hard bedrock	1.00	Large stones	0.94
		Depth to hard bedrock	0.86	Large stones	0.94	Depth to hard bedrock	0.86
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Yanush-----	30	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Slope	1.00
				Shrink-swell	0.50		
Rock outcrop-----	15	Not rated		Not rated		Not rated	
10:							
Billstown-----	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	0.50
11:							
Billstown-----	90	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Shrink-swell	1.00
12:							
Billstown-----	50	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Shrink-swell	1.00
Tiak-----	40	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	0.63	Depth to saturated zone	0.95	Shrink-swell	1.00
				Slope	0.63		

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
13: Bonnerdale-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope	1.00 0.50
14: Carnasaw-----	70	Very limited Shrink-swell Slope	1.00 0.04	Very limited Shrink-swell Slope	1.00 0.04	Very limited Shrink-swell Slope	1.00 1.00
Pirum-----	20	Somewhat limited Shrink-swell Slope Depth to hard bedrock	0.50 0.04 0.01	Very limited Depth to hard bedrock Shrink-swell Slope	1.00 0.50 0.04	Very limited Slope Shrink-swell Depth to hard bedrock	1.00 0.50 0.01
15: Carnasaw-----	55	Very limited Shrink-swell Slope	1.00 0.63	Very limited Shrink-swell Slope	1.00 0.63	Very limited Slope Shrink-swell	1.00 1.00
Sherless-----	35	Very limited Shrink-swell Slope	1.00 0.63	Very limited Shrink-swell Slope Depth to soft bedrock	1.00 0.63 0.01	Very limited Slope Shrink-swell	1.00 1.00
16: Carnasaw-----	60	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Slope Shrink-swell	1.00 1.00
Sherless-----	35	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Shrink-swell Depth to soft bedrock	1.00 1.00 0.01	Very limited Slope Shrink-swell	1.00 1.00
17: Carnasaw-----	50	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Slope Shrink-swell	1.00 1.00
Sherwood-----	25	Very limited Too steep	1.00	Very limited Too steep Depth to hard bedrock	1.00 0.42	Very limited Slope	1.00
Zafra-----	15	Very limited Too steep	1.00	Very limited Too steep Depth to soft bedrock	1.00 0.42	Very limited Slope	1.00
18: Carnasaw-----	50	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Slope Shrink-swell	1.00 1.00

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
18: Zafra-----	25	Very limited Too steep	1.00	Very limited Too steep Depth to soft bedrock	1.00 0.01	Very limited Slope	1.00
Clebit-----	15	Very limited Too steep Depth to hard bedrock	1.00 1.00	Very limited Too steep Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
19: Ceda-----	90	Very limited Flooding Large stones	1.00 0.76	Very limited Flooding Large stones	1.00 0.76	Very limited Flooding Large stones	1.00 0.76
20: Ceda-----	100	Very limited Flooding Large stones	1.00 0.43	Very limited Flooding Large stones	1.00 0.43	Very limited Flooding Large stones	1.00 0.43
21: Clebit-----	40	Very limited Depth to hard bedrock Slope Large stones	1.00 0.04 0.01	Very limited Depth to hard bedrock Slope Large stones	1.00 0.04 0.01	Very limited Depth to hard bedrock Slope Large stones	1.00 1.00 0.01
Carnasaw-----	35	Very limited Shrink-swell Slope	1.00 0.04	Very limited Shrink-swell Slope	1.00 0.04	Very limited Shrink-swell Slope	1.00 1.00
Pirum-----	15	Somewhat limited Shrink-swell Slope Depth to hard bedrock	0.50 0.04 0.01	Very limited Depth to hard bedrock Shrink-swell Slope	1.00 0.50 0.04	Very limited Slope Shrink-swell Depth to hard bedrock	1.00 0.50 0.01
22: Cupco-----	90	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50
23: Dam-----	100	Not rated		Not rated		Not rated	
24: Dela-----	95	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 0.61	Very limited Flooding	1.00
25: Dela-----	90	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 0.61	Very limited Flooding	1.00

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
26: Delight-----	100	Very limited Shrink-swell	1.00	Very limited Shrink-swell Depth to soft bedrock	1.00 0.42	Very limited Shrink-swell Slope	1.00 0.50
27: Gurdon-----	90	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.98 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.98 0.50
28, 29: Guyton-----	100	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
30: Guyton-----	100	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
31: Japany-----	90	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00
32: Kenn-----	95	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding	1.00	Very limited Flooding Shrink-swell	1.00 0.50
33, 34: Kenn-----	90	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding	1.00	Very limited Flooding Shrink-swell	1.00 0.50
35: Kenn-----	55	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding	1.00	Very limited Flooding Shrink-swell	1.00 0.50
Ceda-----	35	Very limited Flooding Large stones	1.00 0.76	Very limited Flooding Large stones	1.00 0.76	Very limited Flooding Large stones	1.00 0.76
36: Kizzia-----	90	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone Slope	0.39 0.12

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
37: Leeper-----	95	Very limited Flooding Shrink-swell Depth to saturated zone	1.00 1.00 0.98	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Flooding Shrink-swell Depth to saturated zone	1.00 1.00 0.98
38: Littlefir-----	60	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00	Very limited Shrink-swell Slope	1.00 0.12
Carnasaw-----	30	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00	Very limited Shrink-swell Slope	1.00 0.12
39: Magnet-----	100	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Shrink-swell Depth to soft bedrock	1.00 1.00 0.35	Very limited Slope Shrink-swell	1.00 1.00
40: Marietta-----	95	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.77 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.77 0.50
41: Mazarn-----	100	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone Depth to soft bedrock	1.00 0.06	Somewhat limited Depth to saturated zone	0.98
42: Mazarn-----	90	Very limited Flooding Depth to saturated zone	1.00 0.98	Very limited Flooding Depth to saturated zone Depth to soft bedrock	1.00 1.00 0.06	Very limited Flooding Depth to saturated zone	1.00 0.98
43: McCaskill-----	95	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
44: Mena-----	95	Somewhat limited Shrink-swell	0.50	Somewhat limited Depth to saturated zone Shrink-swell	0.99 0.50	Somewhat limited Shrink-swell	0.50

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
45: Mena-----	95	Somewhat limited Shrink-swell Slope	0.50 0.04	Somewhat limited Depth to saturated zone Shrink-swell Slope	0.99 0.50 0.04	Very limited Slope Shrink-swell	1.00 0.50
46: Mena-----	95	Somewhat limited Shrink-swell	0.50	Somewhat limited Depth to saturated zone Shrink-swell	0.99 0.50	Somewhat limited Shrink-swell	0.50
47, 48: Murfreesboro-----	90	Somewhat limited Shrink-swell	0.50	Not limited		Somewhat limited Shrink-swell	0.50
49: Nathan-----	90	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone Slope	0.39 0.12
50: Nashoba-----	50	Somewhat limited Depth to hard bedrock	0.64	Very limited Depth to hard bedrock	1.00	Somewhat limited Depth to hard bedrock Slope	0.64 0.12
Bismarck-----	25	Somewhat limited Depth to soft bedrock	0.50	Very limited Depth to soft bedrock	1.00	Somewhat limited Depth to soft bedrock Slope	1.00 0.12
Littlefir-----	20	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00	Very limited Shrink-swell Slope	1.00 0.12
51: Nashoba-----	50	Somewhat limited Depth to hard bedrock Slope	0.64 0.63	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Slope Depth to hard bedrock	1.00 0.64
Bismarck-----	25	Somewhat limited Slope Depth to soft bedrock Large stones	0.63 0.50 0.42	Very limited Depth to soft bedrock Slope Large stones	1.00 0.63 0.42	Very limited Slope Depth to soft bedrock Large stones	1.00 1.00 0.42
Littlefir-----	20	Very limited Shrink-swell Slope	1.00 0.63	Very limited Shrink-swell Slope	1.00 0.63	Very limited Slope Shrink-swell	1.00 1.00
52: Nashoba-----	50	Very limited Too steep Depth to hard bedrock	1.00 0.64	Very limited Too steep Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.64

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
52: Littlefir-----	25	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Slope Shrink-swell	1.00 1.00
Sherless-----	15	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Shrink-swell Depth to soft bedrock	1.00 1.00 0.01	Very limited Slope Shrink-swell	1.00 1.00
53: Neff-----	95	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.98 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.98 0.50
54, 55: Ochlockonee-----	95	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 0.61	Very limited Flooding	1.00
56: Ochlockonee-----	95	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
57, 58: Ouachita-----	95	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
59, 60: Ozan-----	100	Very limited Flooding Depth to saturated zone	1.00 0.81	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 0.81
61: Peanutrock-----	95	Not limited		Not limited		Somewhat limited Slope	0.50
62: Peanutrock-----	95	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
63: Peanutrock-----	90	Very limited Too steep	1.00	Very limited Too steep	1.00	Very limited Slope	1.00
Tiak-----	10	Not rated		Not rated		Not rated	
64: Peanutrock-----	55	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Tiak-----	35	Very limited Shrink-swell Slope	1.00 0.63	Very limited Shrink-swell Slope	1.00 0.63	Very limited Slope Shrink-swell	1.00 1.00

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
65: Pikecity-----	90	Somewhat limited Shrink-swell	0.50	Not limited		Somewhat limited Shrink-swell Slope	0.50 0.12
66: Pikecreek-----	100	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
67: Pirum-----	50	Somewhat limited Shrink-swell Depth to hard bedrock	0.50 0.01	Very limited Depth to hard bedrock Shrink-swell	1.00 0.50	Somewhat limited Shrink-swell Depth to hard bedrock	0.50 0.01
Sherless-----	30	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Depth to soft bedrock	1.00 1.00 0.01	Very limited Depth to saturated zone Shrink-swell Slope	1.00 1.00 0.50
Bonnerdale-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
68: Pits-----	60	Not rated		Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated		Not rated	
69: Riverwash-----	60	Not rated		Not rated		Not rated	
Ceda-----	35	Very limited Flooding Large stones	1.00 0.76	Very limited Flooding Large stones	1.00 0.76	Very limited Flooding Large stones	1.00 0.76
70, 71: Sardis-----	90	Very limited Flooding Shrink-swell Depth to saturated zone	1.00 0.50 0.07	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Shrink-swell Depth to saturated zone	1.00 0.50 0.07
72: Sherless-----	50	Very limited Shrink-swell	1.00	Very limited Shrink-swell Depth to soft bedrock	1.00 0.01	Very limited Shrink-swell Slope	1.00 0.12
Littlefir-----	40	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00	Very limited Shrink-swell Slope	1.00 0.12
73: Sherless-----	50	Very limited Shrink-swell Slope	1.00 0.63	Very limited Shrink-swell Slope Depth to soft bedrock	1.00 0.63 0.01	Very limited Slope Shrink-swell	1.00 1.00

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
73:							
Littlefir-----	25	Very limited Shrink-swell Slope	1.00 0.63	Very limited Shrink-swell Slope	1.00 0.63	Very limited Slope Shrink-swell	1.00 1.00
Nashoba-----	15	Somewhat limited Depth to hard bedrock Slope	0.64 0.63	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Slope Depth to hard bedrock	1.00 0.64
74:							
Sherless-----	45	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Shrink-swell Depth to soft bedrock	1.00 1.00 0.01	Very limited Slope Shrink-swell	1.00 1.00
Littlefir-----	30	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Slope Shrink-swell	1.00 1.00
Nashoba-----	15	Very limited Too steep Depth to hard bedrock	1.00 0.64	Very limited Too steep Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.64
75:							
Sherless-----	60	Very limited Shrink-swell	1.00	Very limited Shrink-swell Depth to soft bedrock	1.00 0.01	Very limited Shrink-swell Slope	1.00 0.12
Nashoba-----	30	Somewhat limited Depth to hard bedrock	0.64	Very limited Depth to hard bedrock	1.00	Somewhat limited Depth to hard bedrock Slope	0.64 0.12
76:							
Smithton-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone	1.00
77, 78:							
Speer-----	95	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
79:							
Stelltown-----	90	Not limited		Somewhat limited Depth to saturated zone	0.99	Not limited	
80:							
Stelltown-----	90	Somewhat limited Slope	0.04	Somewhat limited Depth to saturated zone Slope	0.99 0.04	Very limited Slope	1.00

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
81, 82: Tiak-----	100	Very limited Shrink-swell	1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.95	Very limited Shrink-swell Slope	1.00 0.12
83: Tiak-----	100	Very limited Shrink-swell Slope	1.00 0.63	Very limited Shrink-swell Depth to saturated zone Slope	1.00 0.95 0.63	Very limited Slope Shrink-swell	1.00 1.00
84: Tiak-----	60	Very limited Shrink-swell	1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.95	Very limited Shrink-swell Slope	1.00 0.12
Antoine-----	40	Somewhat limited Shrink-swell	0.50	Very limited Shrink-swell	1.00	Somewhat limited Shrink-swell	0.50
85: Tiak-----	50	Very limited Shrink-swell Slope	1.00 0.63	Very limited Shrink-swell Depth to saturated zone Slope	1.00 0.95 0.63	Very limited Slope Shrink-swell	1.00 1.00
Antoine-----	40	Somewhat limited Shrink-swell Slope	0.50 0.16	Very limited Shrink-swell Slope	1.00 0.16	Very limited Slope Shrink-swell	1.00 0.50
86, 87: Toine-----	95	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
88: Una-----	100	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00
89: Vaughn-----	90	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
90: Vaughn-----	55	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
Pikecreek-----	35	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
91: Water-----	100	Not rated		Not rated		Not rated	

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
92: Wetsaw-----	100	Somewhat limited Shrink-swell Depth to saturated zone	0.50 0.39	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Somewhat limited Shrink-swell Depth to saturated zone	0.50 0.39
93: Woodall-----	100	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
94: Woodall-----	95	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
95: Yanush-----	90	Not limited		Somewhat limited Shrink-swell	0.50	Somewhat limited Slope	0.12
96: Yanush-----	90	Somewhat limited Slope	0.63	Somewhat limited Slope Shrink-swell	0.63 0.50	Very limited Slope	1.00
97, 98: Yanush-----	50	Very limited Too steep	1.00	Very limited Too steep Shrink-swell	1.00 0.50	Very limited Slope	1.00
Avant-----	35	Very limited Too steep	1.00	Very limited Too steep Depth to soft bedrock	1.00 0.06	Very limited Slope	1.00
Bengal-----	15	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Shrink-swell Depth to soft bedrock	1.00 1.00 0.03	Very limited Slope Shrink-swell	1.00 1.00
99: Yanush-----	60	Very limited Too steep	1.00	Very limited Too steep Shrink-swell	1.00 0.50	Very limited Slope	1.00
Bigfork-----	35	Very limited Too steep Large stones Depth to hard bedrock Shrink-swell	1.00 0.93 0.86 0.50	Very limited Too steep Depth to hard bedrock Large stones Shrink-swell	1.00 1.00 0.93 0.50	Very limited Slope Large stones Depth to hard bedrock Shrink-swell	1.00 0.93 0.86 0.50
100: Yanush-----	55	Very limited Too steep	1.00	Very limited Too steep Shrink-swell	1.00 0.50	Very limited Slope	1.00

Soil Survey of Pike County, Arkansas

Table 11a.--Building Site Development (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
100: Bigfork-----	30	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Slope	1.00
		Depth to hard bedrock	0.86	Depth to hard bedrock	1.00	Depth to hard bedrock	0.86
		Large stones	0.82	Large stones	0.82	Large stones	0.82
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
101: Zafra-----	40	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Slope	1.00
				Depth to soft bedrock	0.01		
Carnasaw-----	30	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
Clebit-----	20	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones	0.01	Large stones	0.01	Large stones	0.01

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Table 11b.--Building Site Development (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Very limited Low strength Shrink-swell Depth to saturated zone	1.00 0.50 0.19	Very limited Depth to saturated zone Unstable excavation walls	1.00 0.10	Somewhat limited Depth to saturated zone	0.19
2: Avilla-----	90	Somewhat limited Low strength	0.78	Very limited Unstable excavation walls	1.00	Not limited	
3: Avilla-----	90	Somewhat limited Low strength	0.78	Very limited Unstable excavation walls	1.00	Somewhat limited Gravel	0.26
4: Avilla-----	100	Somewhat limited Low strength Slope	0.78 0.04	Very limited Unstable excavation walls Slope	1.00 0.04	Somewhat limited Slope	0.04
5: Bengal-----	50	Very limited Low strength Shrink-swell Slope	1.00 1.00 0.63	Somewhat limited Slope Too clayey Unstable excavation walls Depth to soft bedrock	0.63 0.50 0.10 0.03	Somewhat limited Large stones Slope Depth to bedrock	0.68 0.63 0.03
Bismarck-----	20	Somewhat limited Depth to soft bedrock Slope Large stones	1.00 0.63 0.42	Very limited Depth to soft bedrock Slope Large stones Unstable excavation walls	1.00 0.63 0.42 0.10	Very limited Depth to bedrock Large stones Droughty Slope	1.00 1.00 0.99 0.63
Yanush-----	20	Somewhat limited Slope	0.63	Very limited Unstable excavation walls Slope	1.00 0.63	Somewhat limited Large stones Slope	0.79 0.63
6: Bengal-----	50	Very limited Too steep Low strength Shrink-swell	1.00 1.00 1.00	Very limited Too steep Too clayey Unstable excavation walls Depth to soft bedrock	1.00 0.50 0.10 0.03	Very limited Too steep Large stones Depth to bedrock	1.00 0.68 0.03

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6: Bismarck-----	20	Very limited Too steep Depth to soft bedrock Large stones	 1.00 1.00 0.42	Very limited Depth to soft bedrock Too steep Large stones Unstable excavation walls	 1.00 1.00 0.42 0.10	Very limited Too steep Depth to bedrock Large stones Droughty	 1.00 1.00 1.00 0.99
Yanush-----	20	Very limited Too steep	 1.00	Very limited Too steep Unstable excavation walls	 1.00 1.00	Very limited Too steep Large stones	 1.00 0.79
7: Bengal-----	55	Very limited Too steep Low strength Shrink-swell	 1.00 1.00 1.00	Very limited Too steep Too clayey Unstable excavation walls Depth to soft bedrock	 1.00 0.50 0.10 0.03	Very limited Too steep Large stones Depth to bedrock	 1.00 1.00 0.03
Bismarck-----	25	Very limited Too steep Depth to soft bedrock Large stones	 1.00 1.00 0.42	Very limited Depth to soft bedrock Too steep Large stones Unstable excavation walls	 1.00 1.00 0.42 0.10	Very limited Too steep Depth to bedrock Large stones Droughty	 1.00 1.00 1.00 0.99
Bigfork-----	20	Very limited Too steep Low strength Large stones Depth to hard bedrock Shrink-swell	 1.00 1.00 0.88 0.86 0.50	Very limited Depth to hard bedrock Too steep Large stones Dense layer Unstable excavation walls	 1.00 1.00 0.88 0.50 0.10	Very limited Too steep Large stones Droughty Depth to bedrock	 1.00 1.00 0.95 0.86
8: Bigfork-----	65	Very limited Low strength Large stones Depth to hard bedrock Shrink-swell Slope	 1.00 0.91 0.86 0.50 0.04	Very limited Depth to hard bedrock Large stones Dense layer Unstable excavation walls Slope	 1.00 0.91 0.50 0.10 0.04	Very limited Large stones Droughty Depth to bedrock Slope	 1.00 0.95 0.86 0.04
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9: Bigfork-----	45	Very limited Too steep Low strength Large stones Depth to hard bedrock Shrink-swell	 1.00 1.00 0.94 0.86 0.50	Very limited Depth to hard bedrock Too steep Large stones Dense layer Unstable excavation walls	 1.00 1.00 0.94 0.50 0.10	Very limited Too steep Large stones Droughty Depth to bedrock	 1.00 1.00 0.95 0.86

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
9: Yanush-----	30	Very limited Too steep	1.00	Very limited Too steep Unstable excavation walls	1.00 1.00	Very limited Too steep Large stones	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
10: Billstown-----	85	Very limited Low strength Shrink-swell	1.00 1.00	Very limited Unstable excavation walls Too clayey	1.00 1.00	Not limited	
11: Billstown-----	90	Very limited Low strength Shrink-swell Slope	1.00 1.00 0.63	Very limited Unstable excavation walls Too clayey Slope	1.00 1.00 0.63	Somewhat limited Slope	0.63
12: Billstown-----	50	Very limited Low strength Shrink-swell Slope	1.00 1.00 0.63	Very limited Unstable excavation walls Too clayey Slope	1.00 1.00 0.63	Somewhat limited Slope	0.63
Tiak-----	40	Very limited Low strength Shrink-swell Slope	1.00 1.00 0.63	Somewhat limited Depth to saturated zone Slope Too clayey Unstable excavation walls	0.95 0.63 0.28 0.10	Somewhat limited Slope	0.63
13: Bonnerdale-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Unstable excavation walls	1.00 0.10	Very limited Depth to saturated zone	1.00
14: Carnasaw-----	70	Very limited Low strength Shrink-swell Slope	1.00 1.00 0.04	Somewhat limited Too clayey Dense layer Unstable excavation walls Slope	0.72 0.50 0.10 0.04	Somewhat limited Large stones Slope	0.99 0.04
Pirum-----	20	Somewhat limited Shrink-swell Slope Depth to hard bedrock	0.50 0.04 0.01	Very limited Depth to hard bedrock Unstable excavation walls Slope	1.00 0.10 0.04	Somewhat limited Large stones Slope Depth to bedrock	0.95 0.04 0.01

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
15: Carnasaw-----	55	Very limited Low strength Shrink-swell Slope	 1.00 1.00 0.63	Somewhat limited Too clayey Slope Dense layer Unstable excavation walls	 0.72 0.63 0.50 0.10	Somewhat limited Large stones Slope	 0.95 0.63
Sherless-----	35	Very limited Shrink-swell Slope	 1.00 0.63	Somewhat limited Slope Unstable excavation walls Depth to soft bedrock	 0.63 0.10 0.01	Somewhat limited Large stones Slope Depth to bedrock	 0.99 0.63 0.01
16: Carnasaw-----	60	Very limited Too steep Low strength Shrink-swell	 1.00 1.00 1.00	Very limited Too steep Too clayey Dense layer Unstable excavation walls	 1.00 0.72 0.50 0.10	Very limited Too steep Large stones	 1.00 1.00
Sherless-----	35	Very limited Too steep Shrink-swell	 1.00 1.00	Very limited Too steep Unstable excavation walls Depth to soft bedrock	 1.00 0.10 0.01	Very limited Too steep Large stones Depth to bedrock	 1.00 0.99 0.01
17: Carnasaw-----	50	Very limited Too steep Low strength Shrink-swell	 1.00 1.00 1.00	Very limited Too steep Too clayey Dense layer Unstable excavation walls	 1.00 0.72 0.50 0.10	Very limited Too steep Large stones	 1.00 0.99
Sherwood-----	25	Very limited Too steep	 1.00	Very limited Too steep Unstable excavation walls Dense layer Depth to hard bedrock	 1.00 1.00 0.50 0.42	Very limited Too steep Large stones	 1.00 0.68
Zafra-----	15	Very limited Too steep	 1.00	Very limited Too steep Unstable excavation walls Depth to soft bedrock	 1.00 1.00 0.42	Very limited Too steep Large stones Depth to bedrock Droughty	 1.00 0.99 0.42 0.14
18: Carnasaw-----	50	Very limited Too steep Low strength Shrink-swell	 1.00 1.00 1.00	Very limited Too steep Too clayey Dense layer Unstable excavation walls	 1.00 0.72 0.50 0.10	Very limited Too steep Large stones	 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
18: Zafra-----	25	Very limited Too steep	1.00	Very limited Too steep Unstable excavation walls Depth to soft bedrock	1.00 1.00 0.01	Very limited Too steep Large stones Depth to bedrock	1.00 0.95 0.01
Clebit-----	15	Very limited Depth to hard bedrock Too steep	1.00 1.00	Very limited Depth to hard bedrock Too steep	1.00 1.00	Very limited Too steep Droughty Depth to bedrock Large stones	1.00 1.00 1.00 1.00
19: Ceda-----	90	Very limited Flooding Large stones	1.00 0.76	Very limited Unstable excavation walls Flooding Large stones	1.00 0.80 0.76	Very limited Flooding Large stones Droughty	1.00 1.00 0.09
20: Ceda-----	100	Very limited Flooding Large stones	1.00 0.43	Very limited Unstable excavation walls Flooding Large stones	1.00 0.80 0.43	Very limited Flooding Large stones Droughty	1.00 1.00 0.09
21: Clebit-----	40	Very limited Depth to hard bedrock Slope Large stones	1.00 0.04 0.01	Very limited Depth to hard bedrock Slope Large stones	1.00 0.04 0.01	Very limited Large stones Droughty Depth to bedrock Slope	1.00 1.00 1.00 0.04
Carnasaw-----	35	Very limited Low strength Shrink-swell Slope	1.00 1.00 0.04	Somewhat limited Too clayey Dense layer Unstable excavation walls Slope	0.72 0.50 0.10 0.04	Very limited Large stones Slope	1.00 0.04
Pirum-----	15	Somewhat limited Shrink-swell Slope Depth to hard bedrock	0.50 0.04 0.01	Very limited Depth to hard bedrock Unstable excavation walls Slope	1.00 0.10 0.04	Very limited Large stones Slope Depth to bedrock	1.00 0.04 0.01
22: Cupco-----	90	Very limited Low strength Depth to saturated zone Shrink-swell Flooding	1.00 0.94 0.50 0.40	Very limited Depth to saturated zone Unstable excavation walls	1.00 0.10	Somewhat limited Depth to saturated zone	0.94
23: Dam-----	100	Not rated		Not rated		Not rated	

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
24: Dela-----	95	Very limited Flooding	1.00	Very limited Unstable excavation walls Depth to saturated zone Flooding	1.00 0.61 0.60	Somewhat limited Flooding	0.60
25: Dela-----	90	Very limited Flooding	1.00	Very limited Unstable excavation walls Flooding Depth to saturated zone	1.00 0.80 0.61	Very limited Flooding	1.00
26: Delight-----	100	Very limited Shrink-swell Low strength	1.00 1.00	Very limited Unstable excavation walls Too clayey Depth to soft bedrock	1.00 1.00 0.42	Very limited Too clayey Depth to bedrock	1.00 0.42
27: Gurdon-----	90	Very limited Flooding Low strength Depth to saturated zone Shrink-swell	1.00 1.00 0.75 0.50	Very limited Depth to saturated zone Flooding Unstable excavation walls	1.00 1.00 0.60 0.10	Somewhat limited Depth to saturated zone Flooding	0.75 0.60
28: Guyton-----	100	Very limited Depth to saturated zone Low strength Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Unstable excavation walls	1.00 1.00 0.10	Very limited Depth to saturated zone	1.00
29: Guyton-----	100	Very limited Depth to saturated zone Flooding Low strength	1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Unstable excavation walls	1.00 1.00 0.60 0.10	Very limited Depth to saturated zone Flooding	1.00 0.60
30: Guyton-----	100	Very limited Depth to saturated zone Low strength Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Unstable excavation walls	1.00 1.00 1.00 0.10	Very limited Depth to saturated zone Ponding	1.00 1.00
31: Japany-----	90	Very limited Shrink-swell Low strength Depth to saturated zone	1.00 1.00 0.96	Very limited Depth to saturated zone Too clayey Unstable excavation walls	1.00 0.41 0.10	Somewhat limited Depth to saturated zone	0.96

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
32: Kenn-----	95	Somewhat limited Shrink-swell Flooding	0.50 0.40	Very limited Unstable excavation walls	1.00	Somewhat limited Gravel	0.32
33: Kenn-----	90	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Unstable excavation walls Flooding	1.00 0.60	Somewhat limited Flooding Gravel	0.60 0.32
34: Kenn-----	90	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Unstable excavation walls Flooding	1.00 0.80	Very limited Flooding	1.00
35: Kenn-----	55	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Unstable excavation walls Flooding	1.00 0.80	Very limited Flooding Large stones	1.00 0.74
Ceda-----	35	Very limited Flooding Large stones	1.00 0.76	Very limited Unstable excavation walls Flooding Large stones	1.00 0.80 0.76	Very limited Flooding Large stones Droughty	1.00 1.00 0.09
36: Kizzia-----	90	Very limited Low strength Depth to saturated zone	1.00 0.19	Very limited Depth to saturated zone Unstable excavation walls	1.00 0.10	Somewhat limited Depth to saturated zone	0.19
37: Leeper-----	95	Very limited Flooding Low strength Shrink-swell Depth to saturated zone	1.00 1.00 1.00 0.75	Very limited Depth to saturated zone Flooding Unstable excavation walls Too clayey	1.00 0.60 0.10 0.08	Somewhat limited Depth to saturated zone Flooding	0.75 0.60
38: Littlefir-----	60	Very limited Low strength Shrink-swell	1.00 1.00	Somewhat limited Too clayey Dense layer Unstable excavation walls	0.50 0.50 0.10	Not limited	
Carnasaw-----	30	Very limited Low strength Shrink-swell	1.00 1.00	Somewhat limited Too clayey Dense layer Unstable excavation walls	0.72 0.50 0.10	Not limited	

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
39: Magnet-----	100	Very limited Too steep Shrink-swell Low strength	 1.00 1.00 1.00	Very limited Too steep Depth to soft bedrock Too clayey Unstable excavation walls	 1.00 0.35 0.12 0.10	Very limited Too steep Large stones Depth to bedrock	 1.00 1.00 0.35
40: Marietta-----	95	Very limited Flooding Low strength Shrink-swell Depth to saturated zone	 1.00 1.00 0.50 0.43	Very limited Depth to saturated zone Flooding Unstable excavation walls	 1.00 0.60 0.10	Somewhat limited Flooding Depth to saturated zone	 0.60 0.43
41: Mazarn-----	100	Very limited Low strength Depth to saturated zone	 1.00 0.75	Very limited Depth to saturated zone Unstable excavation walls Depth to soft bedrock	 1.00 0.10 0.06	Somewhat limited Depth to saturated zone Depth to bedrock	 0.75 0.06
42: Mazarn-----	90	Very limited Flooding Low strength Depth to saturated zone	 1.00 1.00 0.75	Very limited Depth to saturated zone Flooding Unstable excavation walls Depth to soft bedrock	 1.00 0.60 0.10 0.06	Somewhat limited Depth to saturated zone Flooding Depth to bedrock	 0.75 0.60 0.06
43: McCaskill-----	95	Somewhat limited Depth to saturated zone Flooding	 0.94 0.20	Very limited Depth to saturated zone Dense layer Unstable excavation walls	 1.00 0.50 0.10	Somewhat limited Depth to saturated zone	 0.94
44: Mena-----	95	Very limited Low strength Shrink-swell	 1.00 0.50	Very limited Unstable excavation walls Depth to saturated zone Too clayey	 1.00 0.99 0.28	Somewhat limited Gravel	 0.10
45: Mena-----	95	Very limited Low strength Shrink-swell Slope	 1.00 0.50 0.04	Very limited Unstable excavation walls Depth to saturated zone Too clayey Slope	 1.00 0.99 0.28 0.04	Somewhat limited Gravel Slope	 0.10 0.04

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
46: Mena-----	95	Very limited Low strength Shrink-swell	1.00 0.50	Very limited Unstable excavation walls Depth to saturated zone Too clayey	1.00 0.99 0.28	Not limited	
47: Murfreesboro-----	90	Very limited Low strength Shrink-swell	1.00 0.50	Somewhat limited Unstable excavation walls	0.10	Somewhat limited Gravel	0.46
48: Murfreesboro-----	90	Very limited Low strength Shrink-swell	1.00 0.50	Somewhat limited Unstable excavation walls	0.10	Not limited	
49: Nathan-----	90	Very limited Low strength Depth to saturated zone	1.00 0.19	Very limited Depth to saturated zone Unstable excavation walls	1.00 0.10	Somewhat limited Depth to saturated zone	0.19
50: Nashoba-----	50	Somewhat limited Depth to hard bedrock	0.64	Very limited Depth to hard bedrock Unstable excavation walls	1.00 1.00	Somewhat limited Droughty Depth to bedrock Gravel Large stones	0.99 0.65 0.24 0.05
Bismarck-----	25	Somewhat limited Depth to soft bedrock	1.00	Very limited Depth to soft bedrock Unstable excavation walls	1.00 0.10	Very limited Depth to bedrock Droughty Gravel	1.00 0.99 0.62
Littlefir-----	20	Very limited Low strength Shrink-swell	1.00 1.00	Somewhat limited Too clayey Dense layer Unstable excavation walls	0.50 0.50 0.10	Somewhat limited Gravel	0.84
51: Nashoba-----	50	Somewhat limited Depth to hard bedrock Slope	0.64 0.63	Very limited Depth to hard bedrock Unstable excavation walls Slope	1.00 1.00 0.63	Somewhat limited Large stones Droughty Depth to bedrock Slope	0.97 0.96 0.65 0.63
Bismarck-----	25	Somewhat limited Depth to soft bedrock Slope Large stones	1.00 0.63 0.42	Very limited Depth to soft bedrock Slope Large stones Unstable excavation walls	1.00 0.63 0.42 0.10	Very limited Depth to bedrock Large stones Droughty Slope	1.00 1.00 0.99 0.63

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51: Littlefir-----	20	Very limited Low strength Shrink-swell Slope	 1.00 1.00 0.63	Somewhat limited Slope Too clayey Dense layer Unstable excavation walls	 0.63 0.50 0.50 0.10	Somewhat limited Large stones Slope	 0.74 0.63
52: Nashoba-----	50	Very limited Too steep Depth to hard bedrock	 1.00 0.64	Very limited Depth to hard bedrock Too steep Unstable excavation walls	 1.00 1.00 1.00	Very limited Too steep Droughty Large stones Depth to bedrock	 1.00 0.99 0.99 0.65
Littlefir-----	25	Very limited Too steep Low strength Shrink-swell	 1.00 1.00 1.00	Very limited Too steep Too clayey Dense layer Unstable excavation walls	 1.00 0.50 0.50 0.10	Very limited Too steep Large stones	 1.00 1.00
Sherless-----	15	Very limited Too steep Shrink-swell	 1.00 1.00	Very limited Too steep Unstable excavation walls Depth to soft bedrock	 1.00 0.10 0.01	Very limited Too steep Large stones Depth to bedrock	 1.00 0.95 0.01
53: Neff-----	95	Very limited Flooding Low strength Depth to saturated zone Shrink-swell	 1.00 1.00 0.75 0.50	Very limited Depth to saturated zone Flooding Unstable excavation walls	 1.00 0.60 0.10	Somewhat limited Depth to saturated zone Flooding	 0.75 0.60
54: Ochlockonee-----	95	Somewhat limited Flooding	 0.40	Very limited Unstable excavation walls Depth to saturated zone	 1.00 0.61	Not limited	
55: Ochlockonee-----	95	Very limited Flooding	 1.00	Very limited Unstable excavation walls Depth to saturated zone Flooding	 1.00 0.61 0.60	Somewhat limited Flooding	 0.60
56: Ochlockonee-----	95	Very limited Flooding	 1.00	Very limited Unstable excavation walls Flooding	 1.00 0.80	Very limited Flooding	 1.00

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
57: Ouachita-----	95	Very limited Low strength Flooding	1.00 0.40	Somewhat limited Unstable excavation walls	0.10	Not limited	
58: Ouachita-----	95	Very limited Flooding Low strength	1.00 1.00	Somewhat limited Flooding Unstable excavation walls	0.60 0.10	Somewhat limited Flooding	0.60
59: Ozan-----	100	Somewhat limited Depth to saturated zone Flooding	0.48 0.40	Very limited Depth to saturated zone Unstable excavation walls	1.00 0.10	Somewhat limited Depth to saturated zone	0.48
60: Ozan-----	100	Very limited Flooding Depth to saturated zone	1.00 0.48	Very limited Depth to saturated zone Flooding Unstable excavation walls	1.00 0.60 0.10	Somewhat limited Flooding Depth to saturated zone	0.60 0.48
61: Peanutrock-----	95	Not limited		Very limited Unstable excavation walls	1.00	Very limited Gravel	1.00
62: Peanutrock-----	95	Somewhat limited Slope	0.63	Very limited Unstable excavation walls Slope	1.00 0.63	Very limited Gravel Slope	1.00 0.63
63: Peanutrock-----	90	Very limited Too steep	1.00	Very limited Too steep Unstable excavation walls	1.00 1.00	Very limited Too steep Gravel	1.00 1.00
64: Peanutrock-----	55	Somewhat limited Slope	0.63	Very limited Unstable excavation walls Slope	1.00 0.63	Very limited Gravel Slope	1.00 0.63
Tiak-----	35	Very limited Low strength Shrink-swell Slope	1.00 1.00 0.63	Somewhat limited Slope Too clayey Unstable excavation walls	0.63 0.28 0.10	Somewhat limited Slope	0.63
65: Pikecity-----	90	Very limited Low strength Shrink-swell	1.00 0.50	Very limited Unstable excavation walls	1.00	Not rated	

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
66: Pikecreek-----	100	Very limited Flooding	1.00	Very limited Unstable excavation walls Flooding	1.00 0.80	Very limited Flooding Large stones Gravel Droughty	1.00 0.38 0.24 0.09
67: Pirum-----	50	Somewhat limited Shrink-swell Depth to hard bedrock	0.50 0.01	Very limited Depth to hard bedrock Unstable excavation walls	1.00 0.10	Somewhat limited Depth to bedrock	0.01
Sherless-----	30	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Unstable excavation walls Depth to soft bedrock	1.00 0.10 0.01	Very limited Depth to saturated zone Depth to bedrock	1.00 0.01
Bonnerdale-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Unstable excavation walls	1.00 0.10	Very limited Depth to saturated zone	1.00
68: Pits-----	60	Not rated		Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated		Not rated	
69: Riverwash-----	60	Not rated		Not rated		Not rated	
Ceda-----	35	Very limited Flooding Large stones	1.00 0.76	Very limited Unstable excavation walls Flooding Large stones	1.00 0.80 0.76	Very limited Flooding Large stones Droughty	1.00 1.00 0.09
70: Sardis-----	90	Very limited Low strength Shrink-swell Flooding Depth to saturated zone	1.00 0.50 0.40 0.03	Very limited Depth to saturated zone Unstable excavation walls	1.00 0.10	Somewhat limited Depth to saturated zone	0.03
71: Sardis-----	90	Very limited Flooding Low strength Shrink-swell Depth to saturated zone	1.00 1.00 0.50 0.03	Very limited Depth to saturated zone Flooding Unstable excavation walls	1.00 0.60 0.10	Somewhat limited Flooding Depth to saturated zone	0.60 0.03

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
72:							
Sherless-----	50	Very limited Shrink-swell	1.00	Somewhat limited Unstable excavation walls Depth to soft bedrock	0.10 0.01	Somewhat limited Large stones Depth to bedrock	0.32 0.01
Littlefir-----	40	Very limited Low strength Shrink-swell	1.00 1.00	Somewhat limited Too clayey Dense layer Unstable excavation walls	0.50 0.50 0.10	Somewhat limited Large stones Gravel	0.20 0.01
73:							
Sherless-----	50	Very limited Shrink-swell Slope	1.00 0.63	Somewhat limited Slope Unstable excavation walls Depth to soft bedrock	0.63 0.10 0.01	Somewhat limited Large stones Slope Depth to bedrock	0.99 0.63 0.01
Littlefir-----	25	Very limited Low strength Shrink-swell Slope	1.00 1.00 0.63	Somewhat limited Slope Too clayey Dense layer Unstable excavation walls	0.63 0.50 0.50 0.10	Somewhat limited Large stones Slope	0.97 0.63
Nashoba-----	15	Somewhat limited Depth to hard bedrock Slope	0.64 0.63	Very limited Depth to hard bedrock Unstable excavation walls Slope	1.00 1.00 0.63	Somewhat limited Large stones Droughty Depth to bedrock Slope	0.97 0.96 0.65 0.63
74:							
Sherless-----	45	Very limited Too steep Shrink-swell	1.00 1.00	Very limited Too steep Unstable excavation walls Depth to soft bedrock	1.00 0.10 0.01	Very limited Too steep Large stones Depth to bedrock	1.00 0.99 0.01
Littlefir-----	30	Very limited Too steep Low strength Shrink-swell	1.00 1.00 1.00	Very limited Too steep Too clayey Dense layer Unstable excavation walls	1.00 0.50 0.50 0.10	Very limited Too steep Large stones	1.00 0.97
Nashoba-----	15	Very limited Too steep Depth to hard bedrock	1.00 0.64	Very limited Depth to hard bedrock Too steep Unstable excavation walls	1.00 1.00 1.00	Very limited Too steep Large stones Droughty Depth to bedrock	1.00 0.99 0.98 0.65

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
75: Sherless-----	60	Very limited Shrink-swell	1.00	Somewhat limited Unstable excavation walls Depth to soft bedrock	0.10 0.01	Somewhat limited Large stones Depth to bedrock	0.99 0.01
Nashoba-----	30	Somewhat limited Depth to hard bedrock	0.64	Very limited Depth to hard bedrock Unstable excavation walls	1.00 1.00	Somewhat limited Large stones Droughty Depth to bedrock	0.97 0.96 0.65
76: Smithton-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Unstable excavation walls	1.00 0.10	Very limited Depth to saturated zone	1.00
77: Speer-----	95	Very limited Flooding	1.00	Somewhat limited Flooding Unstable excavation walls	0.60 0.10	Somewhat limited Flooding	0.60
78: Speer-----	95	Somewhat limited Flooding	0.40	Somewhat limited Unstable excavation walls	0.10	Not limited	
79: Stelltown-----	90	Not limited		Somewhat limited Depth to saturated zone Unstable excavation walls	0.99 0.10	Not limited	
80: Stelltown-----	90	Somewhat limited Slope	0.04	Somewhat limited Depth to saturated zone Unstable excavation walls Slope	0.99 0.10 0.04	Somewhat limited Slope	0.04
81, 82: Tiak-----	100	Very limited Low strength Shrink-swell	1.00 1.00	Somewhat limited Depth to saturated zone Too clayey Unstable excavation walls	0.95 0.28 0.10	Not limited	
83: Tiak-----	100	Very limited Low strength Shrink-swell Slope	1.00 1.00 0.63	Somewhat limited Depth to saturated zone Slope Too clayey Unstable excavation walls	0.95 0.63 0.28 0.10	Somewhat limited Slope	0.63

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
84:							
Tiak-----	60	Very limited Low strength Shrink-swell	1.00 1.00	Somewhat limited Depth to saturated zone Too clayey Unstable excavation walls	0.95 0.28 0.10	Not limited	
Antoine-----	40	Very limited Low strength Shrink-swell	1.00 0.50	Somewhat limited Unstable excavation walls	0.10	Not limited	
85:							
Tiak-----	50	Very limited Low strength Shrink-swell Slope	1.00 1.00 0.63	Somewhat limited Depth to saturated zone Slope Too clayey Unstable excavation walls	0.95 0.63 0.28 0.10	Somewhat limited Slope	0.63
Antoine-----	40	Very limited Low strength Shrink-swell Slope	1.00 0.50 0.16	Somewhat limited Slope Unstable excavation walls	0.16 0.10	Somewhat limited Slope	0.16
86:							
Toine-----	95	Somewhat limited Flooding	0.40	Somewhat limited Unstable excavation walls	0.10	Not limited	
Toine-----	95	Very limited Flooding	1.00	Somewhat limited Flooding Unstable excavation walls	0.60 0.10	Somewhat limited Flooding	0.60
88:							
Una-----	100	Very limited Depth to saturated zone Flooding Low strength Shrink-swell	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Flooding Too clayey Unstable excavation walls	1.00 0.60 0.50 0.10	Very limited Depth to saturated zone Flooding	1.00 0.60
89:							
Vaughn-----	90	Very limited Flooding	1.00	Very limited Unstable excavation walls Flooding	1.00 0.60	Somewhat limited Flooding Gravel	0.60 0.46
90:							
Vaughn-----	55	Very limited Flooding	1.00	Very limited Unstable excavation walls Flooding	1.00 0.80	Very limited Flooding Gravel	1.00 0.46

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
90: Pikecreek-----	35	Very limited Flooding	1.00	Very limited Unstable excavation walls Flooding	1.00 0.80	Very limited Flooding Large stones Gravel Droughty	1.00 0.38 0.24 0.09
91: Water-----	100	Not rated		Not rated		Not rated	
92: Wetsaw-----	100	Very limited Low strength Shrink-swell Depth to saturated zone	1.00 0.50 0.19	Very limited Depth to saturated zone Unstable excavation walls	1.00 0.10	Somewhat limited Depth to saturated zone	0.19
93: Woodall-----	100	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Flooding Unstable excavation walls	1.00 0.60 0.10	Very limited Depth to saturated zone Flooding	1.00 0.60
94: Woodall-----	95	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Flooding Unstable excavation walls	1.00 0.60 0.10	Very limited Depth to saturated zone Flooding	1.00 0.60
95: Yanush-----	90	Not limited		Very limited Unstable excavation walls	1.00	Very limited Gravel Large stones	1.00 0.01
96: Yanush-----	90	Somewhat limited Slope	0.63	Very limited Unstable excavation walls Slope	1.00 0.63	Very limited Gravel Slope Large stones	1.00 0.63 0.01
97: Yanush-----	50	Very limited Too steep	1.00	Very limited Too steep Unstable excavation walls	1.00 1.00	Very limited Too steep Large stones	1.00 1.00
Avant-----	35	Very limited Too steep	1.00	Very limited Too steep Unstable excavation walls Depth to soft bedrock	1.00 1.00 0.06	Very limited Too steep Large stones Droughty Depth to bedrock Gravel	1.00 1.00 0.28 0.06 0.01

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
97:							
Bengal-----	15	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Low strength	1.00	Too clayey	0.50	Large stones	1.00
		Shrink-swell	1.00	Unstable	0.10	Depth to bedrock	0.03
				excavation walls			
				Depth to soft	0.03		
				bedrock			
98:							
Yanush-----	50	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
				Unstable	1.00	Large stones	0.79
				excavation walls			
Avant-----	35	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
				Unstable	1.00	Large stones	1.00
				excavation walls		Droughty	0.28
				Depth to soft	0.06	Depth to bedrock	0.06
				bedrock		Gravel	0.01
Bengal-----	15	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Low strength	1.00	Too clayey	0.50	Large stones	1.00
		Shrink-swell	1.00	Unstable	0.10	Depth to bedrock	0.03
				excavation walls		Gravel	0.03
				Depth to soft	0.03		
				bedrock			
99:							
Yanush-----	60	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
				Unstable	1.00	Gravel	1.00
				excavation walls		Large stones	0.01
Bigfork-----	35	Very limited		Very limited		Very limited	
		Too steep	1.00	Depth to hard	1.00	Too steep	1.00
		Low strength	1.00	bedrock		Large stones	1.00
		Large stones	0.93	Too steep	1.00	Droughty	0.95
		Depth to hard	0.86	Large stones	0.93	Depth to bedrock	0.86
		bedrock		Dense layer	0.50		
		Shrink-swell	0.50	Unstable	0.10		
				excavation walls			
100:							
Yanush-----	55	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
				Unstable	1.00	Large stones	1.00
				excavation walls			
Bigfork-----	30	Very limited		Very limited		Very limited	
		Too steep	1.00	Depth to hard	1.00	Too steep	1.00
		Low strength	1.00	bedrock		Large stones	1.00
		Depth to hard	0.86	Too steep	1.00	Droughty	0.95
		bedrock		Large stones	0.82	Depth to bedrock	0.86
		Large stones	0.82	Dense layer	0.50		
		Shrink-swell	0.50	Unstable	0.10		
				excavation walls			

Soil Survey of Pike County, Arkansas

Table 11b.--Building Site Development (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
101: Zafra-----	40	Very limited Too steep	1.00	Very limited Too steep Unstable excavation walls Depth to soft bedrock	1.00 1.00 0.01	Very limited Too steep Large stones Depth to bedrock	1.00 1.00 0.01
Carnasaw-----	30	Very limited Too steep Low strength Shrink-swell	1.00 1.00 1.00	Very limited Too steep Too clayey Dense layer Unstable excavation walls	1.00 0.72 0.50 0.10	Very limited Too steep Large stones	1.00 0.92
Clebit-----	20	Very limited Depth to hard bedrock Too steep Large stones	1.00 1.00 1.00 0.01	Very limited Depth to hard bedrock Too steep Large stones	1.00 1.00 1.00 0.01	Very limited Too steep Large stones Droughty Depth to bedrock	1.00 1.00 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone Slope	0.75 0.08
2, 3: Avilla-----	90	Somewhat limited Slow water movement	0.46	Somewhat limited Seepage Slope	0.53 0.32
4: Avilla-----	100	Somewhat limited Slow water movement Slope	0.46 0.04	Very limited Slope Seepage	1.00 0.53
5: Bengal-----	50	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 0.63	Very limited Depth to soft bedrock Slope Seepage	1.00 1.00 0.28
Bismarck-----	20	Very limited Depth to bedrock Slope Large stones	1.00 0.63 0.42	Very limited Depth to soft bedrock Slope Large stones Seepage	1.00 1.00 0.77 0.53
Yanush-----	20	Somewhat limited Slope Slow water movement	0.63 0.46	Very limited Slope Seepage	1.00 0.53
6: Bengal-----	50	Very limited Slow water movement Too steep Depth to bedrock	1.00 1.00 1.00	Very limited Depth to soft bedrock Slope Seepage	1.00 1.00 0.28
Bismarck-----	20	Very limited Depth to bedrock Too steep Large stones	1.00 1.00 0.42	Very limited Depth to soft bedrock Slope Large stones Seepage	1.00 1.00 0.77 0.53
Yanush-----	20	Very limited Too steep Slow water movement	1.00 0.46	Very limited Slope Seepage	1.00 0.53
7: Bengal-----	55	Very limited Slow water movement Too steep Depth to bedrock	1.00 1.00 1.00	Very limited Depth to soft bedrock Slope Seepage	1.00 1.00 0.28

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
7:					
Bismarck-----	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Too steep	1.00	Slope	1.00
		Large stones	0.42	Large stones	0.77
				Seepage	0.53
Bigfork-----	20	Very limited		Very limited	
		Too steep	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Large stones	0.88	Large stones	1.00
		Slow water movement	0.46	Seepage	0.53
8:					
Bigfork-----	65	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Large stones	0.91	Large stones	1.00
		Slow water movement	0.46	Slope	1.00
		Slope	0.04	Seepage	0.53
Rock outcrop-----	25	Not rated		Not rated	
9:					
Bigfork-----	45	Very limited		Very limited	
		Too steep	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Large stones	0.94	Large stones	1.00
		Slow water movement	0.46	Seepage	0.53
Yanush-----	30	Very limited		Very limited	
		Too steep	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Rock outcrop-----	15	Not rated		Not rated	
10:					
Billstown-----	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Slope	0.92
11:					
Billstown-----	90	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63		
12:					
Billstown-----	50	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63		
Tiak-----	40	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.63		
13:					
Bonnerdale-----	95	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	0.59	Slope	0.92
				Depth to soft bedrock	0.13

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
14:					
Carnasaw-----	70	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to bedrock	0.36	Depth to soft bedrock	0.01
		Slope	0.04		
Pirum-----	20	Very limited		Very limited	
		Slow water movement	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	0.04	Seepage	0.53
15:					
Carnasaw-----	55	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63	Depth to soft bedrock	0.01
		Depth to bedrock	0.36		
Sherless-----	35	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00
16:					
Carnasaw-----	60	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Too steep	1.00	Depth to soft bedrock	0.01
		Depth to bedrock	0.36		
Sherless-----	35	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Too steep	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
17:					
Carnasaw-----	50	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Too steep	1.00	Depth to soft bedrock	0.01
		Depth to bedrock	0.36		
Sherwood-----	25	Very limited		Very limited	
		Too steep	1.00	Slope	1.00
		Depth to bedrock	0.94	Depth to soft bedrock	0.84
		Slow water movement	0.50	Seepage	0.53
				Depth to hard bedrock	0.42
Zafra-----	15	Very limited		Very limited	
		Too steep	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
18:					
Carnasaw-----	50	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Too steep	1.00	Depth to soft bedrock	0.01
		Depth to bedrock	0.36		
Zafra-----	25	Very limited		Very limited	
		Too steep	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
18: Clebit-----	15	Very limited Depth to bedrock Too steep	1.00 1.00	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 1.00
19: Ceda-----	90	Very limited Flooding Filtering capacity Seepage, bottom layer Large stones	1.00 1.00 1.00 0.76	Very limited Flooding Large stones Seepage	1.00 1.00 1.00
20: Ceda-----	100	Very limited Flooding Filtering capacity Seepage, bottom layer Large stones	1.00 1.00 1.00 0.43	Very limited Flooding Seepage Large stones	1.00 1.00 1.00
21: Clebit-----	40	Very limited Depth to bedrock Slope Large stones	1.00 0.04 0.01	Very limited Depth to hard bedrock Seepage Slope Large stones	1.00 1.00 1.00 0.40
Carnasaw-----	35	Very limited Slow water movement Depth to bedrock Slope	1.00 0.36 0.04	Very limited Slope Depth to soft bedrock	1.00 0.01
Pirum-----	15	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 0.04	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 0.53
22: Cupco-----	90	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Seepage	1.00 0.40 0.28
23: Dam-----	100	Not rated		Not rated	
24: Dela-----	95	Very limited Flooding Seepage, bottom layer Depth to saturated zone	1.00 1.00 0.99	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 0.71
25: Dela-----	90	Very limited Flooding Seepage, bottom layer Depth to saturated zone	1.00 1.00 0.99	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 0.71
26: Delight-----	100	Very limited Slow water movement Depth to bedrock	1.00 1.00	Very limited Depth to soft bedrock Slope	1.00 0.92

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
27: Gurdon-----	90	Very limited Flooding Depth to saturated zone Slow water movement	 1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	 1.00 1.00 0.50
28: Guyton-----	100	Very limited Slow water movement Depth to saturated zone Flooding	 1.00 1.00 0.40	Very limited Depth to saturated zone Flooding	 1.00 0.40
29: Guyton-----	100	Very limited Flooding Slow water movement Depth to saturated zone	 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	 1.00 1.00
30: Guyton-----	100	Very limited Slow water movement Depth to saturated zone Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
31: Japany-----	90	Very limited Slow water movement Depth to saturated zone	 1.00 1.00	Very limited Depth to saturated zone Slope	 1.00 0.08
32: Kenn-----	95	Somewhat limited Slow water movement Flooding	 0.46 0.40	Somewhat limited Seepage Flooding	 0.53 0.40
33, 34: Kenn-----	90	Very limited Flooding Slow water movement	 1.00 0.46	Very limited Flooding Seepage	 1.00 0.53
35: Kenn-----	55	Very limited Flooding Slow water movement	 1.00 0.46	Very limited Flooding Seepage	 1.00 0.53
Ceda-----	35	Very limited Flooding Filtering capacity Seepage, bottom layer Large stones	 1.00 1.00 1.00 0.76	Very limited Flooding Large stones Seepage	 1.00 1.00 1.00
36: Kizzia-----	90	Very limited Depth to saturated zone Slow water movement	 1.00 0.46	Somewhat limited Depth to saturated zone Slope Seepage	 0.75 0.68 0.53
37: Leeper-----	95	Very limited Flooding Slow water movement Depth to saturated zone	 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
38: Littlefir-----	60	Very limited Slow water movement Depth to bedrock	1.00 0.98	Somewhat limited Depth to soft bedrock Slope	0.93 0.68
Carnasaw-----	30	Very limited Slow water movement Depth to bedrock	1.00 0.36	Somewhat limited Slope Depth to soft bedrock	0.68 0.01
39: Magnet-----	100	Very limited Too steep Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Depth to soft bedrock Slope Seepage Large stones	1.00 1.00 0.32 0.03
40: Marietta-----	95	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00
41: Mazarn-----	100	Very limited Depth to saturated zone Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Depth to soft bedrock Depth to saturated zone Seepage	1.00 1.00 0.28
42: Mazarn-----	90	Very limited Flooding Depth to saturated zone Slow water movement Depth to bedrock	1.00 1.00 1.00 1.00	Very limited Depth to soft bedrock Flooding Depth to saturated zone Seepage	1.00 1.00 1.00 0.28
43: McCaskill-----	95	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.20	Very limited Depth to saturated zone Seepage Flooding	1.00 0.53 0.20
44: Mena-----	95	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Somewhat limited Seepage Slope Depth to saturated zone	0.53 0.32 0.19
45: Mena-----	95	Very limited Slow water movement Depth to saturated zone Slope	1.00 1.00 0.04	Very limited Slope Seepage Depth to saturated zone	1.00 0.53 0.19
46: Mena-----	95	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Somewhat limited Seepage Slope Depth to saturated zone	0.53 0.32 0.19

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
47, 48: Murfreesboro-----	90	Somewhat limited Slow water movement	0.46	Somewhat limited Seepage Slope	0.53 0.32
49: Nathan-----	90	Very limited Depth to saturated zone Slow water movement	1.00 0.46	Somewhat limited Depth to saturated zone Slope Seepage	0.75 0.68 0.53
50: Nashoba-----	50	Very limited Seepage, bottom layer Depth to bedrock	1.00 1.00	Very limited Depth to hard bedrock Seepage Slope	1.00 1.00 0.68
Bismarck-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to soft bedrock Slope Seepage	1.00 0.68 0.53
Littlefir-----	20	Very limited Slow water movement Depth to bedrock	1.00 0.98	Somewhat limited Depth to soft bedrock Slope	0.93 0.68
51: Nashoba-----	50	Very limited Seepage, bottom layer Depth to bedrock Slope	1.00 1.00 0.63	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 1.00
Bismarck-----	25	Very limited Depth to bedrock Slope Large stones	1.00 0.63 0.42	Very limited Depth to soft bedrock Slope Large stones Seepage	1.00 1.00 0.77 0.53
Littlefir-----	20	Very limited Slow water movement Depth to bedrock Slope	1.00 0.98 0.63	Very limited Slope Depth to soft bedrock	1.00 0.93
52: Nashoba-----	50	Very limited Too steep Seepage, bottom layer Depth to bedrock	1.00 1.00 1.00	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 1.00
Littlefir-----	25	Very limited Slow water movement Too steep Depth to bedrock	1.00 1.00 0.98	Very limited Slope Depth to soft bedrock	1.00 0.93
Sherless-----	15	Very limited Slow water movement Too steep Depth to bedrock	1.00 1.00 1.00	Very limited Depth to soft bedrock Slope Seepage	1.00 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
53: Neff-----	95	Very limited Flooding Depth to saturated zone Slow water movement	 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	 1.00 0.99
54: Ochlockonee-----	95	Very limited Seepage, bottom layer Depth to saturated zone Slow water movement Flooding	 1.00 0.99 0.46 0.40	Very limited Seepage Depth to saturated zone Flooding	 1.00 0.71 0.40
55: Ochlockonee-----	95	Very limited Flooding Seepage, bottom layer Depth to saturated zone Slow water movement	 1.00 1.00 0.99 0.46	Very limited Flooding Seepage Depth to saturated zone	 1.00 1.00 0.71
56: Ochlockonee-----	95	Very limited Flooding Seepage, bottom layer Slow water movement	 1.00 1.00 0.46	Very limited Flooding Seepage	 1.00 1.00
57: Ouachita-----	95	Very limited Slow water movement Flooding	 1.00 0.40	Somewhat limited Seepage Flooding	 0.53 0.40
58: Ouachita-----	95	Very limited Flooding Slow water movement	 1.00 1.00	Very limited Flooding Seepage	 1.00 0.53
59: Ozan-----	100	Very limited Depth to saturated zone Slow water movement Flooding	 1.00 0.50 0.40	Very limited Depth to saturated zone Seepage Flooding	 1.00 0.50 0.40
60: Ozan-----	100	Very limited Flooding Depth to saturated zone Slow water movement	 1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Seepage	 1.00 1.00 0.50
61: Peanutrock-----	95	Very limited Seepage, bottom layer Slow water movement	 1.00 0.46	Very limited Seepage Slope	 1.00 0.92
62: Peanutrock-----	95	Very limited Seepage, bottom layer Slope Slow water movement	 1.00 0.63 0.46	Very limited Slope Seepage	 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
63: Peanutrock-----	90	Very limited		Very limited	
		Too steep	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.46		
64: Peanutrock-----	55	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00
		Slow water movement	0.46		
Tiak-----	35	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63		
65: Pikecity-----	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.46	Slope	0.68
66: Pikecreek-----	100	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Large stones	0.02
67: Pirum-----	50	Very limited		Very limited	
		Slow water movement	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Seepage	0.53
				Slope	0.32
Sherless-----	30	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to saturated zone	1.00
				Slope	0.92
Bonnerdale-----	20	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to bedrock	0.59	Slope	0.32
				Depth to soft bedrock	0.13
68: Pits-----	60	Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated	
69: Riverwash-----	60	Not rated		Not rated	
Ceda-----	35	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Filtering capacity	1.00	Large stones	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Large stones	0.76		

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
70: Sardis-----	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
		Flooding	0.40	Flooding	0.40
71: Sardis-----	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
72: Sherless-----	50	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00
				Slope	0.68
Littlefir-----	40	Very limited		Somewhat limited	
		Slow water movement	1.00	Depth to soft bedrock	0.93
		Depth to bedrock	0.98	Slope	0.68
73: Sherless-----	50	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00
Littlefir-----	25	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to bedrock	0.98	Depth to soft bedrock	0.93
		Slope	0.63		
Nashoba-----	15	Very limited		Very limited	
		Seepage, bottom layer	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00
74: Sherless-----	45	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Too steep	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
Littlefir-----	30	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Too steep	1.00	Depth to soft bedrock	0.93
		Depth to bedrock	0.98		
Nashoba-----	15	Very limited		Very limited	
		Too steep	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
75: Sherless-----	60	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00
				Slope	0.68

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
75: Nashoba-----	30	Very limited Seepage, bottom layer Depth to bedrock	1.00 1.00	Very limited Depth to hard bedrock Seepage Slope	1.00 1.00 0.68
76: Smithton-----	100	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone	1.00
77: Speer-----	95	Very limited Flooding Slow water movement	1.00 0.46	Very limited Flooding Seepage	1.00 0.53
78: Speer-----	95	Somewhat limited Slow water movement Flooding	0.46 0.40	Somewhat limited Seepage Flooding	0.53 0.40
79: Stelltown-----	90	Very limited Depth to saturated zone Slow water movement	1.00 0.46	Very limited Depth to saturated zone Seepage Slope	1.00 0.53 0.32
80: Stelltown-----	90	Very limited Depth to saturated zone Slow water movement Slope	1.00 0.46 0.04	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.53
81, 82: Tiak-----	100	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Slope	1.00 0.68
83: Tiak-----	100	Very limited Slow water movement Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Slope Depth to saturated zone	1.00 1.00
84: Tiak-----	60	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Slope	1.00 0.68
Antoine-----	40	Very limited Slow water movement	1.00	Somewhat limited Slope	0.32
85: Tiak-----	50	Very limited Slow water movement Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Slope Depth to saturated zone	1.00 1.00
Antoine-----	40	Very limited Slow water movement Slope	1.00 0.16	Very limited Slope	1.00

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
86: Toine-----	95	Somewhat limited Slow water movement Flooding	0.46 0.40	Somewhat limited Seepage Flooding	0.53 0.40
87: Toine-----	95	Very limited Flooding Slow water movement	1.00 0.46	Very limited Flooding Seepage	1.00 0.53
88: Una-----	100	Very limited Flooding Slow water movement Depth to saturated zone	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
89: Vaughn-----	90	Very limited Flooding Seepage, bottom layer	1.00 1.00	Very limited Flooding Seepage	1.00 1.00
90: Vaughn-----	55	Very limited Flooding Seepage, bottom layer	1.00 1.00	Very limited Flooding Seepage	1.00 1.00
Pikecreek-----	35	Very limited Flooding Filtering capacity Seepage, bottom layer	1.00 1.00 1.00	Very limited Flooding Seepage Large stones	1.00 1.00 0.02
91: Water-----	100	Not rated		Not rated	
92: Wetsaw-----	100	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Seepage Slope	1.00 0.53 0.32
93: Woodall-----	100	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
94: Woodall-----	95	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
95: Yanush-----	90	Somewhat limited Slow water movement	0.46	Somewhat limited Slope Seepage	0.68 0.53
96: Yanush-----	90	Somewhat limited Slope Slow water movement	0.63 0.46	Very limited Slope Seepage	1.00 0.53

Soil Survey of Pike County, Arkansas

Table 12a.--Sanitary Facilities (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
97, 98:					
Yanush-----	50	Very limited		Very limited	
		Too steep	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Avant-----	35	Very limited		Very limited	
		Too steep	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
				Large stones	0.04
Bengal-----	15	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Too steep	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	0.28
99:					
Yanush-----	60	Very limited		Very limited	
		Too steep	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Bigfork-----	35	Very limited		Very limited	
		Too steep	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Large stones	0.93	Large stones	1.00
		Slow water movement	0.46	Seepage	0.53
100:					
Yanush-----	55	Very limited		Very limited	
		Too steep	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Bigfork-----	30	Very limited		Very limited	
		Too steep	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Large stones	0.82	Large stones	1.00
		Slow water movement	0.46	Seepage	0.53
101:					
Zafra-----	40	Very limited		Very limited	
		Too steep	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
Carnasaw-----	30	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Too steep	1.00	Depth to soft bedrock	0.01
		Depth to bedrock	0.36		
Clebit-----	20	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Too steep	1.00	Slope	1.00
		Large stones	0.01	Seepage	1.00
				Large stones	0.40

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Very limited Depth to saturated zone Too clayey	0.99 0.50	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone	0.86
2, 3: Avilla-----	90	Somewhat limited Too clayey	0.50	Not limited		Somewhat limited Too clayey	0.50
4: Avilla-----	100	Somewhat limited Too clayey Slope	0.50 0.04	Somewhat limited Slope	0.04	Somewhat limited Too clayey Slope	0.50 0.04
5: Bengal-----	50	Very limited Depth to bedrock Too clayey Slope	1.00 1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Too clayey Hard to compact Depth to bedrock Slope	1.00 1.00 1.00 0.63
Bismarck-----	20	Very limited Depth to bedrock Slope Large stones	1.00 0.63 0.42	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope Large stones Gravel content	1.00 0.63 0.42 0.23
Yanush-----	20	Somewhat limited Slope Too clayey	0.63 0.50	Somewhat limited Slope	0.63	Very limited Gravel content Slope Too clayey	1.00 0.63 0.50
6: Bengal-----	50	Very limited Too steep Depth to bedrock Too clayey	1.00 1.00 1.00	Very limited Too steep Depth to bedrock	1.00 1.00	Very limited Too steep Too clayey Hard to compact Depth to bedrock	1.00 1.00 1.00 1.00
Bismarck-----	20	Very limited Too steep Depth to bedrock Large stones	1.00 1.00 0.42	Very limited Too steep Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Too steep Large stones Gravel content	1.00 1.00 0.42 0.23
Yanush-----	20	Very limited Too steep Too clayey	1.00 0.50	Very limited Too steep	1.00	Very limited Too steep Gravel content Too clayey	1.00 1.00 0.50
7: Bengal-----	55	Very limited Too steep Depth to bedrock Too clayey	1.00 1.00 1.00	Very limited Too steep Depth to bedrock	1.00 1.00	Very limited Too steep Too clayey Hard to compact Depth to bedrock	1.00 1.00 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7:							
Bismarck-----	25	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep	1.00
		Large stones	0.42			Large stones	0.42
						Gravel content	0.23
Bigfork-----	20	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones	0.88			Large stones	0.88
		Too clayey	0.50			Too clayey	0.50
8:							
Bigfork-----	65	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones	0.91	Slope	0.04	Large stones	0.91
		Too clayey	0.50			Too clayey	0.50
		Slope	0.04			Slope	0.04
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9:							
Bigfork-----	45	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones	0.94			Large stones	0.94
		Too clayey	0.50			Too clayey	0.50
Yanush-----	30	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Too clayey	0.50			Gravel content	1.00
						Too clayey	0.50
Rock outcrop-----	15	Not rated		Not rated		Not rated	
10:							
Billstown-----	85	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
11:							
Billstown-----	90	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.63	Too clayey	1.00
		Slope	0.63			Hard to compact	1.00
						Slope	0.63
12:							
Billstown-----	50	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.63	Too clayey	1.00
		Slope	0.63			Hard to compact	1.00
						Slope	0.63
Tiak-----	40	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Too clayey	1.00
		saturated zone		saturated zone		Hard to compact	1.00
		Too clayey	1.00	Slope	0.63	Slope	0.63
		Slope	0.63			Depth to	0.09
						saturated zone	

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
13: Bonnerdale-----	95	Very limited Depth to saturated zone Depth to bedrock	1.00 1.00	Very limited Depth to saturated zone Seepage Depth to bedrock	1.00 1.00 0.14	Very limited Depth to saturated zone Seepage Depth to bedrock	1.00 0.52 0.14
14: Carnasaw-----	70	Very limited Depth to bedrock Too clayey Slope	1.00 1.00 0.04	Somewhat limited Slope Depth to bedrock	0.04 0.01	Very limited Too clayey Hard to compact Slope Depth to bedrock	1.00 1.00 0.04 0.01
Pirum-----	20	Very limited Depth to bedrock Slope	1.00 0.04	Very limited Depth to bedrock Slope	1.00 0.04	Very limited Depth to bedrock Slope	1.00 0.04
15: Carnasaw-----	55	Very limited Depth to bedrock Too clayey Slope	1.00 1.00 0.63	Somewhat limited Slope Depth to bedrock	0.63 0.01	Very limited Too clayey Hard to compact Slope Depth to bedrock	1.00 1.00 0.63 0.01
Sherless-----	35	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63
16: Carnasaw-----	60	Very limited Too steep Depth to bedrock Too clayey	1.00 1.00 1.00	Very limited Too steep Depth to bedrock	1.00 0.01	Very limited Too steep Too clayey Hard to compact Depth to bedrock	1.00 1.00 1.00 0.01
Sherless-----	35	Very limited Too steep Depth to bedrock	1.00 1.00	Very limited Too steep Depth to bedrock	1.00 1.00	Very limited Too steep Depth to bedrock	1.00 1.00
17: Carnasaw-----	50	Very limited Too steep Depth to bedrock Too clayey	1.00 1.00 1.00	Very limited Too steep Depth to bedrock	1.00 0.01	Very limited Too steep Too clayey Hard to compact Depth to bedrock	1.00 1.00 1.00 0.01
Sherwood-----	25	Very limited Too steep Depth to bedrock	1.00 1.00	Very limited Too steep Depth to bedrock	1.00 0.84	Very limited Too steep Depth to bedrock	1.00 0.84
Zafra-----	15	Very limited Too steep Depth to bedrock Too clayey	1.00 1.00 0.50	Very limited Too steep Depth to bedrock	1.00 1.00	Very limited Too steep Depth to bedrock Gravel content Too clayey	1.00 1.00 0.99 0.50

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
18: Carnasaw-----	50	Very limited Too steep Depth to bedrock Too clayey	 1.00 1.00 1.00	Very limited Too steep Depth to bedrock	 1.00 0.01	Very limited Too steep Too clayey Hard to compact Depth to bedrock	 1.00 1.00 1.00 0.01
Zafra-----	25	Very limited Too steep Depth to bedrock Too clayey	 1.00 1.00 0.50	Very limited Too steep Depth to bedrock	 1.00 1.00	Very limited Too steep Gravel content Depth to bedrock Too clayey	 1.00 1.00 1.00 0.50
Clebit-----	15	Very limited Too steep Depth to bedrock	 1.00 1.00	Very limited Too steep Depth to bedrock	 1.00 1.00	Very limited Depth to bedrock Too steep Gravel content Seepage	 1.00 1.00 0.71 0.50
19: Ceda-----	90	Very limited Flooding Seepage, bottom layer Large stones	 1.00 1.00 0.78	Very limited Flooding Seepage	 1.00 1.00	Very limited Seepage Large stones Gravel content	 1.00 0.78 0.53
20: Ceda-----	100	Very limited Flooding Seepage, bottom layer Large stones	 1.00 1.00 0.61	Very limited Flooding Seepage	 1.00 1.00	Very limited Seepage Large stones Gravel content	 1.00 0.61 0.53
21: Clebit-----	40	Very limited Depth to bedrock Slope Large stones	 1.00 0.04 0.01	Very limited Depth to bedrock Slope	 1.00 0.04	Very limited Depth to bedrock Gravel content Seepage Slope Large stones	 1.00 0.62 0.50 0.04 0.01
Carnasaw-----	35	Very limited Depth to bedrock Too clayey Slope	 1.00 1.00 0.04	Somewhat limited Slope Depth to bedrock	 0.04 0.01	Very limited Too clayey Hard to compact Slope Depth to bedrock	 1.00 1.00 0.04 0.01
Pirum-----	15	Very limited Depth to bedrock Slope	 1.00 0.04	Very limited Depth to bedrock Slope	 1.00 0.04	Very limited Depth to bedrock Slope	 1.00 0.04
22: Cupco-----	90	Very limited Depth to saturated zone Too clayey Flooding	 1.00 0.50 0.40	Very limited Depth to saturated zone Flooding	 1.00 0.40	Very limited Depth to saturated zone Too clayey	 1.00 0.50
23: Dam-----	100	Not rated		Not rated		Not rated	

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
24: Dela-----	95	Very limited Flooding Depth to saturated zone Seepage, bottom layer	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Somewhat limited Seepage	0.52
25: Dela-----	90	Very limited Flooding Depth to saturated zone Seepage, bottom layer	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Somewhat limited Seepage	0.52
26: Delight-----	100	Very limited Depth to bedrock Too clayey	1.00 1.00	Very limited Depth to bedrock	1.00	Very limited Too clayey Hard to compact Depth to bedrock	1.00 1.00 1.00
27: Gurdon-----	90	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too clayey	0.99 0.50
28: Guyton-----	100	Very limited Depth to saturated zone Too clayey Flooding	1.00 0.50 0.40	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Depth to saturated zone Too clayey	1.00 0.50
29: Guyton-----	100	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 0.50
30: Guyton-----	100	Very limited Depth to saturated zone Ponding Too clayey	1.00 1.00 0.50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Too clayey	1.00 1.00 0.50
31: Japany-----	90	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Too clayey Hard to compact	1.00 1.00 1.00
32: Kenn-----	95	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Somewhat limited Gravel content	0.97

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
33: Kenn-----	90	Very limited Flooding	1.00	Very limited Flooding	1.00	Somewhat limited Gravel content	0.97
34: Kenn-----	90	Very limited Flooding	1.00	Very limited Flooding	1.00	Somewhat limited Gravel content	0.90
35: Kenn-----	55	Very limited Flooding	1.00	Very limited Flooding	1.00	Somewhat limited Gravel content	0.93
Ceda-----	35	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Seepage	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Large stones	0.78
		Large stones	0.78			Gravel content	0.53
36: Kizzia-----	90	Very limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone	0.86
37: Leeper-----	95	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Too clayey Hard to compact Depth to saturated zone	1.00 1.00 0.99
38: Littlefir-----	60	Very limited Depth to bedrock Too clayey	1.00 1.00	Somewhat limited Depth to bedrock	0.94	Very limited Too clayey Hard to compact Depth to bedrock	1.00 1.00 0.94
Carnasaw-----	30	Very limited Depth to bedrock Too clayey	1.00 1.00	Somewhat limited Depth to bedrock	0.01	Very limited Too clayey Hard to compact Depth to bedrock	1.00 1.00 0.01
39: Magnet-----	100	Very limited Too steep Depth to bedrock Too clayey	1.00 1.00 1.00	Very limited Too steep Depth to bedrock	1.00 1.00	Very limited Too steep Too clayey Hard to compact Depth to bedrock	1.00 1.00 1.00 1.00
40: Marietta-----	95	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone Too clayey	0.95 0.50
41: Mazarn-----	100	Very limited Depth to saturated zone Depth to bedrock Too clayey	1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Depth to saturated zone Too clayey	1.00 0.99 0.50

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
42: Mazarn-----	90	Very limited Flooding Depth to saturated zone Depth to bedrock Too clayey	1.00 1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Depth to bedrock	1.00 1.00 1.00	Very limited Depth to bedrock Depth to saturated zone Too clayey	1.00 0.99 0.50
43: McCaskill-----	95	Very limited Depth to saturated zone Flooding	1.00 0.20	Very limited Depth to saturated zone Flooding	1.00 0.20	Very limited Depth to saturated zone	1.00
44: Mena-----	95	Very limited Too clayey Depth to saturated zone	1.00 0.86	Somewhat limited Depth to saturated zone	0.19	Very limited Too clayey Hard to compact Depth to saturated zone	1.00 1.00 0.47
45: Mena-----	95	Very limited Too clayey Depth to saturated zone Slope	1.00 0.86 0.04	Somewhat limited Depth to saturated zone Slope	0.19 0.04	Very limited Too clayey Hard to compact Depth to saturated zone Slope	1.00 1.00 0.47 0.04
46: Mena-----	95	Very limited Too clayey Depth to saturated zone	1.00 0.86	Somewhat limited Depth to saturated zone	0.19	Very limited Too clayey Hard to compact Depth to saturated zone	1.00 1.00 0.47
47, 48: Murfreesboro-----	90	Not limited		Not limited		Somewhat limited Too clayey	0.50
49: Nathan-----	90	Very limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone	0.86
50: Nashoba-----	50	Very limited Depth to bedrock Seepage, bottom layer	1.00 1.00	Very limited Seepage Depth to bedrock	1.00 1.00	Very limited Gravel content Depth to bedrock Seepage	1.00 1.00 0.52
Bismarck-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to bedrock	1.00	Very limited Depth to bedrock Gravel content	1.00 0.94
Littlefir-----	20	Very limited Depth to bedrock Too clayey	1.00 1.00	Somewhat limited Depth to bedrock	0.94	Very limited Too clayey Hard to compact Depth to bedrock	1.00 1.00 0.94

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51: Nashoba-----	50	Very limited Depth to bedrock Seepage, bottom layer Slope	 1.00 1.00 0.63	Very limited Seepage Depth to bedrock Slope	 1.00 1.00 0.63	Very limited Gravel content Depth to bedrock Slope Seepage	 1.00 1.00 0.63 0.52
Bismarck-----	25	Very limited Depth to bedrock Slope Large stones	 1.00 0.63 0.42	Very limited Depth to bedrock Slope	 1.00 0.63	Very limited Depth to bedrock Slope Large stones Gravel content	 1.00 0.63 0.42 0.23
Littlefir-----	20	Very limited Depth to bedrock Too clayey Slope	 1.00 1.00 0.63	Somewhat limited Depth to bedrock Slope	 0.94 0.63	Very limited Too clayey Hard to compact Depth to bedrock Slope	 1.00 1.00 0.94 0.63
52: Nashoba-----	50	Very limited Too steep Depth to bedrock Seepage, bottom layer	 1.00 1.00 1.00	Very limited Too steep Seepage Depth to bedrock	 1.00 1.00 1.00	Very limited Too steep Gravel content Depth to bedrock Seepage	 1.00 1.00 1.00 0.52
Littlefir-----	25	Very limited Too steep Depth to bedrock Too clayey	 1.00 1.00 1.00	Very limited Too steep Depth to bedrock	 1.00 0.94	Very limited Too steep Too clayey Hard to compact Depth to bedrock	 1.00 1.00 1.00 0.94
Sherless-----	15	Very limited Too steep Depth to bedrock	 1.00 1.00	Very limited Too steep Depth to bedrock	 1.00 1.00	Very limited Too steep Depth to bedrock	 1.00 1.00
53: Neff-----	95	Very limited Flooding Depth to saturated zone Too clayey	 1.00 1.00 0.50	Very limited Flooding Depth to saturated zone	 1.00 0.99	Very limited Depth to saturated zone Too clayey	 0.99 0.50
54: Ochlockonee-----	95	Very limited Depth to saturated zone Seepage, bottom layer Flooding	 1.00 1.00 0.40	Very limited Depth to saturated zone Seepage Flooding	 1.00 1.00 0.40	Not limited	
55: Ochlockonee-----	95	Very limited Flooding Depth to saturated zone Seepage, bottom layer	 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	 1.00 1.00 1.00	Not limited	

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
56: Ochlockonee-----	95	Very limited Flooding Seepage, bottom layer	1.00 1.00	Very limited Flooding Seepage	1.00 1.00	Not limited	
57: Ouachita-----	95	Somewhat limited Too clayey Flooding	0.50 0.40	Somewhat limited Flooding	0.40	Somewhat limited Too clayey	0.50
58: Ouachita-----	95	Very limited Flooding Too clayey	1.00 0.50	Very limited Flooding	1.00	Somewhat limited Too clayey	0.50
59: Ozan-----	100	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Depth to saturated zone Flooding	1.00 0.40	Somewhat limited Depth to saturated zone	0.96
60: Ozan-----	100	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone	0.96
61: Peanutrock-----	95	Very limited Seepage, bottom layer Too sandy	1.00 0.50	Very limited Seepage	1.00	Very limited Gravel content Too sandy Seepage	1.00 0.50 0.22
62: Peanutrock-----	95	Very limited Seepage, bottom layer Slope Too sandy	1.00 0.63 0.50	Very limited Seepage Slope	1.00 0.63	Very limited Gravel content Slope Too sandy Seepage	1.00 0.63 0.50 0.22
63: Peanutrock-----	90	Very limited Too steep Seepage, bottom layer Too sandy	1.00 1.00 0.50	Very limited Too steep Seepage	1.00 1.00	Very limited Too steep Gravel content Too sandy Seepage	1.00 1.00 0.50 0.22
64: Peanutrock-----	55	Very limited Seepage, bottom layer Slope Too sandy	1.00 0.63 0.50	Very limited Seepage Slope	1.00 0.63	Very limited Gravel content Slope Too sandy Seepage	1.00 0.63 0.50 0.22
Tiak-----	35	Very limited Too clayey Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Too clayey Hard to compact Slope	1.00 1.00 0.63

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
65: Pikecity-----	90	Very limited Seepage, bottom layer Too clayey	1.00 0.50	Very limited Seepage	1.00	Very limited Gravel content Seepage Too clayey	1.00 0.52 0.50
66: Pikecreek-----	100	Very limited Flooding Seepage, bottom layer Too sandy Large stones	1.00 1.00 1.00 0.02	Very limited Flooding Seepage	1.00 1.00	Very limited Too sandy Seepage Gravel content Large stones	1.00 1.00 1.00 0.02
67: Pirum-----	50	Very limited Depth to bedrock	1.00	Very limited Depth to bedrock	1.00	Very limited Depth to bedrock	1.00
Sherless-----	30	Very limited Depth to saturated zone Depth to bedrock	1.00 1.00	Very limited Depth to saturated zone Depth to bedrock	1.00 1.00	Very limited Depth to saturated zone Depth to bedrock	1.00 1.00
Bonnerdale-----	20	Very limited Depth to saturated zone Depth to bedrock	1.00 1.00	Very limited Depth to saturated zone Seepage Depth to bedrock	1.00 1.00 0.14	Very limited Depth to saturated zone Seepage Depth to bedrock	1.00 0.52 0.14
68: Pits-----	60	Not rated		Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated		Not rated	
69: Riverwash-----	60	Not rated		Not rated		Not rated	
Ceda-----	35	Very limited Flooding Seepage, bottom layer Large stones	1.00 1.00 0.78	Very limited Flooding Seepage	1.00 1.00	Very limited Seepage Large stones Gravel content	1.00 0.78 0.53
70: Sardis-----	90	Very limited Depth to saturated zone Too clayey Flooding	1.00 0.50 0.40	Very limited Depth to saturated zone Flooding	1.00 0.40	Somewhat limited Depth to saturated zone Too clayey	0.68 0.50
71: Sardis-----	90	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone Too clayey	0.68 0.50
72: Sherless-----	50	Very limited Depth to bedrock	1.00	Very limited Depth to bedrock	1.00	Very limited Depth to bedrock	1.00

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
72: Littlefir-----	40	Very limited Depth to bedrock Too clayey	1.00 1.00	Somewhat limited Depth to bedrock	0.94	Very limited Too clayey Hard to compact Depth to bedrock	1.00 1.00 0.94
73: Sherless-----	50	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63
Littlefir-----	25	Very limited Depth to bedrock Too clayey Slope	1.00 1.00 0.63	Somewhat limited Depth to bedrock Slope	0.94 0.63	Very limited Too clayey Hard to compact Depth to bedrock Slope	1.00 1.00 0.94 0.63
Nashoba-----	15	Very limited Depth to bedrock Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Depth to bedrock Slope	1.00 1.00 0.63	Very limited Gravel content Depth to bedrock Slope Seepage	1.00 1.00 0.63 0.52
74: Sherless-----	45	Very limited Too steep Depth to bedrock	1.00 1.00	Very limited Too steep Depth to bedrock	1.00 1.00	Very limited Too steep Depth to bedrock	1.00 1.00
Littlefir-----	30	Very limited Too steep Depth to bedrock Too clayey	1.00 1.00 1.00	Very limited Too steep Depth to bedrock	1.00 0.94	Very limited Too steep Too clayey Hard to compact Depth to bedrock	1.00 1.00 1.00 0.94
Nashoba-----	15	Very limited Too steep Depth to bedrock Seepage, bottom layer	1.00 1.00 1.00	Very limited Too steep Seepage Depth to bedrock	1.00 1.00 1.00	Very limited Too steep Gravel content Depth to bedrock Seepage	1.00 1.00 1.00 0.52
75: Sherless-----	60	Very limited Depth to bedrock	1.00	Very limited Depth to bedrock	1.00	Very limited Depth to bedrock	1.00
Nashoba-----	30	Very limited Depth to bedrock Seepage, bottom layer	1.00 1.00	Very limited Seepage Depth to bedrock	1.00 1.00	Very limited Gravel content Depth to bedrock Seepage	1.00 1.00 0.52
76: Smithton-----	100	Very limited Depth to saturated zone Too clayey	1.00 0.50	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
77: Speer-----	95	Very limited Flooding	1.00	Very limited Flooding	1.00	Not limited	
78: Speer-----	95	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Not limited	

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
79: Stelltown-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.47
80: Stelltown-----	90	Very limited Depth to saturated zone Slope	1.00 0.04	Very limited Depth to saturated zone Slope	1.00 0.04	Somewhat limited Depth to saturated zone Slope	0.47 0.04
81, 82: Tiak-----	100	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Too clayey Hard to compact Depth to saturated zone	1.00 1.00 0.09
83: Tiak-----	100	Very limited Depth to saturated zone Too clayey Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Too clayey Hard to compact Slope Depth to saturated zone	1.00 1.00 0.63 0.09
84: Tiak-----	60	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Too clayey Hard to compact Depth to saturated zone	1.00 1.00 0.09
Antoine-----	40	Somewhat limited Too clayey	0.50	Not limited		Not limited	
85: Tiak-----	50	Very limited Depth to saturated zone Too clayey Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Too clayey Hard to compact Slope Depth to saturated zone	1.00 1.00 0.63 0.09
Antoine-----	40	Somewhat limited Too clayey Slope	0.50 0.16	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16
86: Toine-----	95	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Not limited	
87: Toine-----	95	Very limited Flooding	1.00	Very limited Flooding	1.00	Not limited	
88: Una-----	100	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too clayey Hard to compact	1.00 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
89: Vaughn-----	90	Very limited Flooding Seepage, bottom layer	1.00 1.00	Very limited Flooding Seepage	1.00 1.00	Somewhat limited Gravel content Seepage	0.88 0.52
90: Vaughn-----	55	Very limited Flooding Seepage, bottom layer	1.00 1.00	Very limited Flooding Seepage	1.00 1.00	Somewhat limited Gravel content Seepage	0.88 0.52
Pikecreek-----	35	Very limited Flooding Seepage, bottom layer Too sandy Large stones	1.00 1.00 1.00 0.02	Very limited Flooding Seepage	1.00 1.00	Very limited Too sandy Seepage Gravel content Large stones	1.00 1.00 1.00 0.02
91: Water-----	100	Not rated		Not rated		Not rated	
92: Wetsaw-----	100	Very limited Depth to saturated zone Too clayey	1.00 0.50	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone Too clayey	0.86 0.50
93: Woodall-----	100	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone	1.00
94: Woodall-----	95	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone	1.00
95: Yanush-----	90	Somewhat limited Too clayey	0.50	Not limited		Very limited Gravel content Too clayey	1.00 0.50
96: Yanush-----	90	Somewhat limited Slope Too clayey	0.63 0.50	Somewhat limited Slope	0.63	Very limited Gravel content Slope Too clayey	1.00 0.63 0.50
97: Yanush-----	50	Very limited Too steep Too clayey	1.00 0.50	Very limited Too steep	1.00	Very limited Too steep Gravel content Too clayey	1.00 1.00 0.50
Avant-----	35	Very limited Too steep Depth to bedrock Too clayey	1.00 1.00 0.50	Very limited Too steep Depth to bedrock	1.00 1.00	Very limited Too steep Depth to bedrock Gravel content Too clayey	1.00 1.00 0.99 0.50

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
97:							
Bengal-----	15	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
						Depth to bedrock	1.00
98:							
Yanush-----	50	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Too clayey	0.50			Gravel content	1.00
						Too clayey	0.50
Avant-----	35	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too clayey	0.50			Gravel content	0.99
						Too clayey	0.50
Bengal-----	15	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
						Depth to bedrock	1.00
99:							
Yanush-----	60	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Too clayey	0.50			Gravel content	1.00
						Too clayey	0.50
Bigfork-----	35	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones	0.93			Large stones	0.93
		Too clayey	0.50			Too clayey	0.50
100:							
Yanush-----	55	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Too clayey	0.50			Gravel content	1.00
						Too clayey	0.50
Bigfork-----	30	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones	0.82			Large stones	0.82
		Too clayey	0.50			Too clayey	0.50
101:							
Zafra-----	40	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Gravel content	1.00
		Too clayey	0.50			Depth to bedrock	1.00
						Too clayey	0.50
Carnasaw-----	30	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Too steep	1.00
		Depth to bedrock	1.00	Depth to bedrock	0.01	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
						Depth to bedrock	0.01

Soil Survey of Pike County, Arkansas

Table 12b.--Sanitary Facilities (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
101: Clebit-----	20	Very limited		Very limited		Very limited	
		Too steep	1.00	Too steep	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep	1.00
		Large stones	0.01			Gravel content	0.62
						Seepage	0.50
						Large stones	0.01

Soil Survey of Pike County, Arkansas

Table 13a.--Construction Materials (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
1: Antoine-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2, 3: Avilla-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
4: Avilla-----	100	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
5, 6: Bengal-----	50	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Bismarck-----	20	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Yanush-----	20	Fair		Poor	
		Thickest layer	0.15	Thickest layer	0.00
		Bottom layer	0.55	Bottom layer	0.00
7: Bengal-----	55	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Bismarck-----	25	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Bigfork-----	20	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
8: Bigfork-----	65	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop-----	25	Not rated		Not rated	
9: Bigfork-----	45	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00

Soil Survey of Pike County, Arkansas

Table 13a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
9: Yanush-----	30	Fair		Poor	
		Thickest layer	0.15	Thickest layer	0.00
		Bottom layer	0.55	Bottom layer	0.00
Rock outcrop-----	15	Not rated		Not rated	
10: Billstown-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
11: Billstown-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
12: Billstown-----	50	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Tiak-----	40	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
13: Bonnerdale-----	95	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
14: Carnasaw-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Pirum-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
15: Carnasaw-----	55	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Sherless-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
16: Carnasaw-----	60	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Sherless-----	35	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
17: Carnasaw-----	50	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00

Soil Survey of Pike County, Arkansas

Table 13a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
17:					
Sherwood-----	25	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Zafra-----	15	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
18:					
Carnasaw-----	50	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Zafra-----	25	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Clebit-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
19:					
Ceda-----	90	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.40	Thickest layer	0.01
20:					
Ceda-----	100	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.40	Thickest layer	0.01
21:					
Clebit-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Carnasaw-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Pirum-----	15	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
22:					
Cupco-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
23:					
Dam-----	100	Not rated		Not rated	
24:					
Dela-----	95	Fair		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.30	Bottom layer	0.00
25:					
Dela-----	90	Fair		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.30	Bottom layer	0.00

Soil Survey of Pike County, Arkansas

Table 13a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
26: Delight-----	100	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
27: Gurdon-----	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
28, 29, 30: Guyton-----	100	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
31: Japany-----	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
32: Kenn-----	95	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.30	Thickest layer	0.00
33, 34: Kenn-----	90	Fair		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.30	Bottom layer	0.00
35: Kenn-----	55	Fair		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.30	Bottom layer	0.00
Ceda-----	35	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.40	Thickest layer	0.01
36: Kizzia-----	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
37: Leeper-----	95	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
38: Littlefir-----	60	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Carnasaw-----	30	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
39: Magnet-----	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Soil Survey of Pike County, Arkansas

Table 13a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
40: Marietta-----	95	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
41: Mazarn-----	100	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
42: Mazarn-----	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
43: McCaskill-----	95	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
44, 45, 46: Mena-----	95	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
47, 48: Murfreesboro-----	90	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
49: Nathan-----	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
50, 51: Nashoba-----	50	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.02
		Bottom layer	0.00	Bottom layer	0.02
Bismarck-----	25	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
Littlefir-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
52: Nashoba-----	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.02
Littlefir-----	25	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Sherless-----	15	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00

Soil Survey of Pike County, Arkansas

Table 13a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
53: Neff-----	95	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
54, 55, 56: Ochlockonee-----	95	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.08
57, 58: Ouachita-----	95	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
59, 60: Ozan-----	100	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
61, 62: Peanutrock-----	95	Fair		Fair	
		Thickest layer	0.18	Thickest layer	0.00
		Bottom layer	0.32	Bottom layer	0.09
63: Peanutrock-----	90	Fair		Fair	
		Thickest layer	0.18	Thickest layer	0.00
		Bottom layer	0.32	Bottom layer	0.09
64: Peanutrock-----	55	Fair		Fair	
		Thickest layer	0.18	Thickest layer	0.00
		Bottom layer	0.32	Bottom layer	0.09
Tiak-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
65: Pikecity-----	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
66: Pikecreek-----	100	Fair		Fair	
		Thickest layer	0.09	Bottom layer	0.09
		Bottom layer	0.09	Thickest layer	0.09
67: Pirum-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Sherless-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Bonnerdale-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Soil Survey of Pike County, Arkansas

Table 13a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
68:					
Pits-----	60	Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated	
69:					
Riverwash-----	60	Not rated		Not rated	
Ceda-----	35	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.40	Thickest layer	0.01
70:					
Sardis-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
71:					
Sardis-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
72:					
Sherless-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Littlefir-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
73:					
Sherless-----	50	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Littlefir-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Nashoba-----	15	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.02
		Thickest layer	0.00	Thickest layer	0.02
74:					
Sherless-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Littlefir-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Nashoba-----	15	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.02
		Bottom layer	0.00	Bottom layer	0.02
75:					
Sherless-----	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Soil Survey of Pike County, Arkansas

Table 13a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
75: Nashoba-----	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.02
		Bottom layer	0.00	Bottom layer	0.02
76: Smithton-----	100	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
77, 78: Speer-----	95	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
79, 80: Stelltown-----	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.01
		Thickest layer	0.00	Thickest layer	0.03
81, 82, 83: Tiak-----	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
84: Tiak-----	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Antoine-----	40	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
85: Tiak-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Antoine-----	40	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
86, 87: Toine-----	95	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
88: Una-----	100	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
89: Vaughn-----	90	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.18	Bottom layer	0.11
90: Vaughn-----	55	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.18	Bottom layer	0.11

Soil Survey of Pike County, Arkansas

Table 13a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
90: Pikecreek-----	35	Fair		Fair	
		Thickest layer	0.09	Bottom layer	0.09
		Bottom layer	0.09	Thickest layer	0.09
91: Water-----	100	Not rated		Not rated	
92: Wetsaw-----	100	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
93: Woodall-----	100	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.02
		Bottom layer	0.00	Thickest layer	0.02
94: Woodall-----	95	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.02
		Bottom layer	0.00	Thickest layer	0.02
95, 96: Yanush-----	90	Fair		Poor	
		Thickest layer	0.15	Bottom layer	0.00
		Bottom layer	0.55	Thickest layer	0.00
97, 98: Yanush-----	50	Fair		Poor	
		Thickest layer	0.15	Bottom layer	0.00
		Bottom layer	0.55	Thickest layer	0.00
Avant-----	35	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
Bengal-----	15	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
99: Yanush-----	60	Fair		Poor	
		Thickest layer	0.15	Bottom layer	0.00
		Bottom layer	0.55	Thickest layer	0.00
Bigfork-----	35	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
100: Yanush-----	55	Fair		Poor	
		Thickest layer	0.15	Bottom layer	0.00
		Bottom layer	0.55	Thickest layer	0.00
Bigfork-----	30	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00

Soil Survey of Pike County, Arkansas

Table 13a.--Construction Materials (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
101: Zafra-----	40	Poor Thickest layer Bottom layer	 0.00 0.00	Poor Bottom layer Thickest layer	 0.00 0.00
Carnasaw-----	30	Poor Bottom layer Thickest layer	 0.00 0.00	Poor Bottom layer Thickest layer	 0.00 0.00
Clebit-----	20	Poor Thickest layer Bottom layer	 0.00 0.00	Poor Thickest layer Bottom layer	 0.00 0.00

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Fair		Poor		Fair	
		Low content of organic matter	0.12	Low strength	0.00	Depth to wetness	0.53
		Too acid	0.20	Shrink-swell	0.29	Too acid	0.76
		Water erosion	0.99	Depth to wetness	0.53		
2, 3: Avilla-----	90	Fair		Fair		Poor	
		Too acid	0.32	Low strength	0.22	Hard to reclaim (rock fragments)	0.00
		Too clayey	0.88			Too clayey	0.63
		Low content of organic matter	0.88			Too acid	0.88
						Rock fragments	0.98
4: Avilla-----	100	Fair		Fair		Poor	
		Too acid	0.32	Low strength	0.22	Hard to reclaim (rock fragments)	0.00
		Low content of organic matter	0.88			Too clayey	0.63
		Too clayey	0.88			Too acid	0.88
						Slope	0.96
						Rock fragments	0.98
5: Bengal-----	50	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.37
		Too acid	0.50	Shrink-swell	0.19	Too acid	0.88
		Depth to bedrock	0.97			Rock fragments	0.90
		Droughty	0.99			Depth to bedrock	0.97
Bismarck-----	20	Poor		Poor		Poor	
		Depth to bedrock	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Droughty	0.00	Cobble content	0.16	Depth to bedrock	0.00
		Too acid	0.54			Slope	0.37
		Cobble content	0.58			Too acid	0.98
Yanush-----	20	Fair		Fair		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
		Too acid	0.54			Hard to reclaim (rock fragments)	0.00
		Too clayey	0.76			Slope	0.37
						Too clayey	0.63
6: Bengal-----	50	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
		Too acid	0.50	Slope	0.00	Too acid	0.88
		Depth to bedrock	0.97	Shrink-swell	0.19	Rock fragments	0.90
		Droughty	0.99			Depth to bedrock	0.97

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6: Bismarck-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Too acid	0.54	Cobble content	0.16	Depth to bedrock	0.00
		Cobble content	0.58			Too acid	0.98
Yanush-----	20	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.54			Rock fragments	0.00
		Too clayey	0.76			Hard to reclaim (rock fragments)	0.00
						Too clayey	0.63
7: Bengal-----	55	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.50	Low strength	0.00	Rock fragments	0.83
		Depth to bedrock	0.97	Shrink-swell	0.19	Too acid	0.88
		Droughty	0.99			Depth to bedrock	0.97
Bismarck-----	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Too acid	0.54	Cobble content	0.16	Depth to bedrock	0.00
		Cobble content	0.58			Too acid	0.98
Bigfork-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Depth to bedrock	0.14	Low strength	0.00	Depth to bedrock	0.14
		Stone content	0.26	Cobble content	0.85	Too clayey	0.57
		Too acid	0.54	Shrink-swell	0.87	Too acid	0.98
		Cobble content	0.83	Stones	0.90		
		Too clayey	0.98				
8: Bigfork-----	65	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Stone content	0.00	Low strength	0.00	Depth to bedrock	0.14
		Low content of organic matter	0.12	Stones	0.23	Too clayey	0.57
		Depth to bedrock	0.14	Shrink-swell	0.87	Slope	0.96
		Too acid	0.54	Cobble content	0.99	Too acid	0.98
		Too clayey	0.98				
		Cobble content	0.99				
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9: Bigfork-----	45	Poor		Poor		Poor	
		Droughty	0.00	Slope	0.00	Slope	0.00
		Stone content	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Low strength	0.00	Depth to bedrock	0.14
		Depth to bedrock	0.14	Stones	0.09	Too clayey	0.57
		Too acid	0.54	Shrink-swell	0.87	Too acid	0.98
		Too clayey	0.98	Cobble content	0.99		

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
9: Yanush-----	30	Fair Low content of organic matter Too acid Too clayey	0.12 0.54 0.76	Poor Slope	0.00	Poor Slope Hard to reclaim (rock fragments) Rock fragments Too clayey	0.00 0.00 0.00 0.63
Rock outcrop-----	15	Not rated		Not rated		Not rated	
10: Billstown-----	85	Poor Too clayey Too acid Low content of organic matter Water erosion	0.00 0.26 0.50 0.99	Poor Low strength Shrink-swell	0.00 0.12	Poor Too clayey Too acid	0.00 0.88
11: Billstown-----	90	Poor Too clayey Too acid Low content of organic matter Water erosion	0.00 0.26 0.50 0.99	Poor Low strength Shrink-swell	0.00 0.12	Poor Too clayey Slope Too acid	0.00 0.37 0.88
12: Billstown-----	50	Poor Too clayey Too acid Low content of organic matter Water erosion	0.00 0.26 0.50 0.99	Poor Low strength Shrink-swell	0.00 0.12	Poor Too clayey Slope Too acid	0.00 0.37 0.88
Tiak-----	40	Poor Low content of organic matter Too clayey Too acid	0.00 0.00 0.16	Poor Low strength Shrink-swell	0.00 0.23	Poor Too clayey Slope Too acid	0.00 0.37 0.88
13: Bonnerdale-----	95	Fair Too acid Low content of organic matter	0.12 0.88	Poor Depth to wetness Depth to bedrock	0.00 0.87	Poor Depth to wetness Too acid Rock fragments	0.00 0.59 0.98
14: Carnasaw-----	70	Poor Too clayey Low content of organic matter Too acid Water erosion	0.00 0.12 0.32 0.99	Poor Low strength Shrink-swell Depth to bedrock	0.00 0.12 0.99	Poor Too clayey Rock fragments Too acid Slope	0.00 0.88 0.88 0.96
Pirum-----	20	Fair Low content of organic matter Too acid Droughty Depth to bedrock	0.02 0.50 0.96 0.99	Poor Depth to bedrock Shrink-swell	0.00 0.96	Fair Rock fragments Too acid Slope Depth to bedrock	0.24 0.88 0.96 0.99

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
15: Carnasaw-----	55	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Shrink-swell	0.12	Slope	0.37
		Too acid	0.32	Depth to bedrock	0.99	Rock fragments	0.88
		Water erosion	0.99			Too acid	0.88
Sherless-----	35	Fair		Poor		Fair	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.37
		Too acid	0.50	Shrink-swell	0.95	Too acid	0.59
		Droughty	0.98			Rock fragments	0.68
		Depth to bedrock	0.99			Depth to bedrock	0.99
16: Carnasaw-----	60	Poor		Poor		Poor	
		Too clayey	0.00	Slope	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Low strength	0.00	Slope	0.00
		Too acid	0.32	Shrink-swell	0.12	Too acid	0.88
		Water erosion	0.99	Depth to bedrock	0.99	Rock fragments	0.88
Sherless-----	35	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.50	Depth to bedrock	0.00	Too acid	0.59
		Droughty	0.98	Shrink-swell	0.95	Rock fragments	0.68
		Depth to bedrock	0.99			Depth to bedrock	0.99
17: Carnasaw-----	50	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.12	Slope	0.00	Too clayey	0.00
		Too acid	0.32	Shrink-swell	0.12	Too acid	0.88
		Water erosion	0.99	Depth to bedrock	0.99	Rock fragments	0.88
Sherwood-----	25	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.32	Depth to bedrock	0.16	Too acid	0.88
Zafra-----	15	Fair		Poor		Poor	
		Droughty	0.05	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50			Too clayey	0.44
		Depth to bedrock	0.58			Depth to bedrock	0.58
		Too clayey	0.76			Too acid	0.76
18: Carnasaw-----	50	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.12	Slope	0.00	Too clayey	0.00
		Too acid	0.32	Shrink-swell	0.12	Too acid	0.88
		Water erosion	0.99	Depth to bedrock	0.99	Rock fragments	0.88

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
18: Zafra-----	25	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.29	Slope	0.00	Rock fragments	0.00
		Too acid	0.50			Too clayey	0.44
		Too clayey	0.76			Too acid	0.76
		Depth to bedrock	0.99			Depth to bedrock	0.99
Clebit-----	15	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Stones	0.99	Depth to bedrock	0.00
		Too acid	0.68				
		Stone content	0.99				
19: Ceda-----	90	Fair		Poor		Poor	
		Cobble content	0.22	Cobble content	0.00	Hard to reclaim (rock fragments)	0.00
		Low content of organic matter	0.88			Rock fragments	0.00
		Too acid	0.95				
20: Ceda-----	100	Fair		Poor		Poor	
		Cobble content	0.39	Cobble content	0.00	Hard to reclaim (rock fragments)	0.00
		Low content of organic matter	0.88			Rock fragments	0.00
		Too acid	0.95				
21: Clebit-----	40	Poor		Poor		Poor	
		Depth to bedrock	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Stones	0.74	Rock fragments	0.00
		Low content of organic matter	0.12	Cobble content	0.95	Slope	0.96
		Too acid	0.68				
		Stone content	0.74				
Carnasaw-----	35	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Shrink-swell	0.12	Too acid	0.88
		Too acid	0.32	Depth to bedrock	0.99	Rock fragments	0.88
		Water erosion	0.99			Slope	0.96
Pirum-----	15	Fair		Poor		Fair	
		Low content of organic matter	0.02	Depth to bedrock	0.00	Rock fragments	0.24
		Too acid	0.50	Shrink-swell	0.96	Too acid	0.88
		Droughty	0.96			Slope	0.96
		Depth to bedrock	0.99			Depth to bedrock	0.99
22: Cupco-----	90	Fair		Poor		Fair	
		Too acid	0.68	Low strength	0.00	Depth to wetness	0.04
		Low content of organic matter	0.88	Depth to wetness	0.04		
		Water erosion	0.99	Shrink-swell	0.87		

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
23: Dam-----	100	Not rated		Not rated		Not rated	
24: Dela-----	95	Fair Low content of organic matter Too acid	0.88 0.97	Good		Poor Hard to reclaim (rock fragments)	0.00
25: Dela-----	90	Fair Low content of organic matter Too acid	0.88 0.97	Good		Poor Hard to reclaim (rock fragments)	0.00
26: Delight-----	100	Poor Too clayey Low content of organic matter Depth to bedrock Droughty Water erosion	0.00 0.50 0.58 0.75 0.99	Poor Low strength Depth to bedrock Shrink-swell	0.00 0.00 0.00	Poor Too clayey Depth to bedrock	0.00 0.58
27: Gurdon-----	90	Fair Low content of organic matter Too acid Water erosion	0.12 0.54 0.90	Poor Low strength Depth to wetness Shrink-swell	0.00 0.14 0.96	Fair Depth to wetness Too acid	0.14 0.98
28, 29, 30: Guyton-----	100	Fair Low content of organic matter Too acid Water erosion Sodium content	0.12 0.74 0.90 0.97	Poor Low strength Depth to wetness	0.00 0.00	Poor Depth to wetness Sodium content	0.00 0.98
31: Japany-----	90	Poor Too clayey Low content of organic matter Too acid	0.00 0.12 0.68	Poor Low strength Shrink-swell Depth to wetness	0.00 0.00 0.02	Poor Too clayey Depth to wetness	0.00 0.02
32: Kenn-----	95	Fair Low content of organic matter Too acid	0.02 0.32	Fair Shrink-swell	0.99	Poor Hard to reclaim (rock fragments) Rock fragments Too acid	0.00 0.41 0.88
33, 34: Kenn-----	90	Fair Low content of organic matter Too acid	0.02 0.32	Fair Shrink-swell	0.99	Poor Hard to reclaim (rock fragments) Rock fragments Too acid	0.00 0.41 0.88

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
35: Kenn-----	55	Fair Low content of organic matter Too acid	0.02 0.32	Fair Shrink-swell	0.99	Poor Hard to reclaim (rock fragments) Rock fragments Too acid	0.00 0.41 0.88
Ceda-----	35	Fair Cobble content Low content of organic matter Too acid	0.22 0.88 0.95	Poor Cobble content	0.00	Poor Hard to reclaim (rock fragments) Rock fragments	0.00 0.00
36: Kizzia-----	90	Fair Low content of organic matter Too acid Water erosion	0.12 0.50 0.99	Fair Low strength Depth to wetness	0.22 0.53	Fair Depth to wetness Too acid	0.53 0.95
37: Leeper-----	95	Poor Too clayey Low content of organic matter	0.00 0.50	Poor Low strength Shrink-swell Depth to wetness	0.00 0.12 0.14	Poor Too clayey Depth to wetness	0.00 0.14
38: Littlefir-----	60	Poor Too clayey Low content of organic matter Too acid Water erosion	0.00 0.12 0.50 0.99	Poor Low strength Depth to bedrock Shrink-swell	0.00 0.07 0.12	Poor Too clayey Too acid	0.00 0.88
Carnasaw-----	30	Poor Too clayey Low content of organic matter Too acid Water erosion	0.00 0.12 0.32 0.99	Poor Low strength Shrink-swell Depth to bedrock	0.00 0.12 0.99	Poor Too clayey Too acid Rock fragments	0.00 0.88 0.88
39: Magnet-----	100	Poor Too clayey Stone content Depth to bedrock Too acid Droughty Low content of organic matter	0.00 0.53 0.65 0.68 0.69 0.88	Poor Low strength Slope Depth to bedrock Shrink-swell Stones	0.00 0.00 0.00 0.12 0.85	Poor Slope Too clayey Rock fragments Depth to bedrock	0.00 0.00 0.28 0.65
40: Marietta-----	95	Fair Low content of organic matter	0.12	Poor Low strength Depth to wetness Shrink-swell	0.00 0.32 0.93	Fair Depth to wetness	0.32

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
41: Mazarn-----	100	Fair		Poor		Fair	
		Low content of organic matter	0.12	Low strength	0.00	Depth to wetness	0.14
		Too acid	0.50	Depth to bedrock	0.00	Too acid	0.88
		Depth to bedrock	0.93	Depth to wetness	0.14	Depth to bedrock	0.93
		Water erosion	0.99				
42: Mazarn-----	90	Fair		Poor		Fair	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to wetness	0.14
		Too acid	0.50	Low strength	0.00	Too acid	0.88
		Depth to bedrock	0.93	Depth to wetness	0.14	Depth to bedrock	0.93
		Water erosion	0.99				
43: McCaskill-----	95	Fair		Fair		Fair	
		Low content of organic matter	0.02	Depth to wetness	0.04	Depth to wetness	0.04
		Too acid	0.08			Too acid	0.59
		Water erosion	0.99				
44: Mena-----	95	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too acid	0.50	Depth to wetness	0.89	Hard to reclaim	0.54
		Low content of organic matter	0.88	Shrink-swell	0.95	(rock fragments)	
		Water erosion	0.99			Too acid	0.59
						Depth to wetness	0.89
						Rock fragments	0.95
45: Mena-----	95	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too acid	0.50	Depth to wetness	0.89	Hard to reclaim	0.54
		Low content of organic matter	0.88	Shrink-swell	0.95	(rock fragments)	
		Water erosion	0.99			Too acid	0.59
						Depth to wetness	0.89
						Rock fragments	0.95
						Slope	0.96
46: Mena-----	95	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too acid	0.50	Depth to wetness	0.89	Hard to reclaim	0.54
		Low content of organic matter	0.88	Shrink-swell	0.95	(rock fragments)	
		Water erosion	0.99			Too acid	0.59
						Depth to wetness	0.89
						Rock fragments	0.95
47, 48: Murfreesboro-----	90	Fair		Fair		Fair	
		Low content of organic matter	0.02	Shrink-swell	0.99	Rock fragments	0.82
		Too acid	0.32			Too acid	0.88

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
49: Nathan-----	90	Fair Low content of organic matter Too acid	0.02 0.16	Fair Depth to wetness	0.53	Fair Depth to wetness Too acid	0.53 0.68
50: Nashoba-----	50	Poor Droughty Low content of organic matter Depth to bedrock Too acid Too sandy	0.00 0.12 0.35 0.54 0.98	Poor Depth to bedrock	0.00	Poor Rock fragments Depth to bedrock Too sandy	0.00 0.35 0.98
Bismarck-----	25	Poor Droughty Depth to bedrock Too acid	0.00 0.00 0.54	Poor Depth to bedrock Cobble content	0.00 0.94	Poor Depth to bedrock Rock fragments Too acid	0.00 0.00 0.98
Littlefir-----	20	Poor Too clayey Low content of organic matter Too acid Water erosion	0.00 0.12 0.50 0.99	Poor Low strength Depth to bedrock Shrink-swell	0.00 0.07 0.12	Poor Too clayey Too acid	0.00 0.88
51: Nashoba-----	50	Poor Droughty Low content of organic matter Depth to bedrock Too acid Too sandy	0.00 0.12 0.35 0.54 0.98	Poor Depth to bedrock	0.00	Poor Rock fragments Depth to bedrock Slope Too sandy	0.00 0.35 0.37 0.98
Bismarck-----	25	Poor Depth to bedrock Droughty Too acid Cobble content	0.00 0.00 0.54 0.58	Poor Depth to bedrock Cobble content	0.00 0.16	Poor Depth to bedrock Rock fragments Slope Too acid	0.00 0.00 0.37 0.98
Littlefir-----	20	Poor Too clayey Low content of organic matter Too acid Water erosion	0.00 0.12 0.50 0.99	Poor Low strength Depth to bedrock Shrink-swell	0.00 0.07 0.12	Poor Too clayey Slope Too acid	0.00 0.37 0.88
52: Nashoba-----	50	Poor Droughty Low content of organic matter Depth to bedrock Too acid Too sandy	0.00 0.12 0.35 0.54 0.98	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Slope Depth to bedrock Too sandy	0.00 0.00 0.35 0.98

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
52: Littlefir-----	25	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.12	Depth to bedrock	0.07	Too clayey	0.00
		Too acid	0.50	Shrink-swell	0.12	Too acid	0.88
		Water erosion	0.90	Slope	0.50		
Sherless-----	15	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
		Too acid	0.50	Slope	0.00	Too acid	0.59
		Water erosion	0.90	Shrink-swell	0.95	Rock fragments	0.76
		Depth to bedrock	0.99			Depth to bedrock	0.99
53: Neff-----	95	Fair		Poor		Fair	
		Low content of organic matter	0.12	Low strength	0.00	Depth to wetness	0.14
		Too acid	0.54	Depth to wetness	0.14	Too clayey	0.44
		Too clayey	0.76	Shrink-swell	0.87		
		Water erosion	0.90				
54, 55, 56: Ochlockonee-----	95	Fair		Good		Fair	
		Too acid	0.32			Too acid	0.88
		Low content of organic matter	0.88			Too sandy	0.99
		Too sandy	0.99				
57, 58: Ouachita-----	95	Fair		Poor		Fair	
		Too acid	0.54	Low strength	0.00	Too acid	0.98
		Water erosion	0.99				
59, 60: Ozan-----	100	Fair		Fair		Fair	
		Too acid	0.54	Depth to wetness	0.29	Depth to wetness	0.29
						Too acid	0.98
61: Peanutrock-----	95	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.99	Hard to reclaim (rock fragments)	0.00
		Too acid	0.50			Rock fragments	0.00
						Too acid	0.88
62: Peanutrock-----	95	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.99	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.00
						Slope	0.37
						Too acid	0.88

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
63: Peanutrock-----	90	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Rock fragments	0.00
		Too acid	0.50	Cobble content	0.99	Hard to reclaim (rock fragments)	0.00
						Slope	0.00
						Too acid	0.88
64: Peanutrock-----	55	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.99	Hard to reclaim (rock fragments)	0.00
		Too acid	0.50			Rock fragments	0.00
						Slope	0.37
						Too acid	0.88
Tiak-----	35	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.00	Shrink-swell	0.23	Slope	0.37
		Too acid	0.16			Too acid	0.88
65: Pikecity-----	90	Not rated		Good		Not rated	
66: Pikecreek-----	100	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.62	Rock fragments	0.00
		Too sandy	0.92			Hard to reclaim (rock fragments)	0.00
		Too acid	0.95			Too sandy	0.92
		Cobble content	0.98				
67: Pirum-----	50	Fair		Poor		Fair	
		Low content of organic matter	0.02	Depth to bedrock	0.00	Rock fragments	0.12
		Too acid	0.50	Shrink-swell	0.96	Too acid	0.88
		Droughty	0.96			Depth to bedrock	0.99
		Depth to bedrock	0.99				
Sherless-----	30	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to wetness	0.00
		Too acid	0.50	Depth to wetness	0.00	Too acid	0.59
		Droughty	0.98	Shrink-swell	0.95	Rock fragments	0.76
		Depth to bedrock	0.99			Depth to bedrock	0.99
Bonnerdale-----	20	Fair		Poor		Poor	
		Too acid	0.12	Depth to wetness	0.00	Depth to wetness	0.00
		Low content of organic matter	0.88	Depth to bedrock	0.87	Too acid	0.59
						Rock fragments	0.98
68: Pits-----	60	Not rated		Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated		Not rated	

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
69: Riverwash-----	60	Not rated		Not rated		Not rated	
Ceda-----	35	Fair		Poor		Poor	
		Cobble content	0.22	Cobble content	0.00	Rock fragments	0.00
		Low content of organic matter	0.88			Hard to reclaim (rock fragments)	0.00
		Too acid	0.95				
70, 71: Sardis-----	90	Fair		Poor		Fair	
		Low content of organic matter	0.50	Low strength	0.00	Depth to wetness	0.76
		Too acid	0.54	Depth to wetness	0.76	Too acid	0.98
		Water erosion	0.99	Shrink-swell	0.96		
72: Sherless-----	50	Fair		Poor		Fair	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Too acid	0.59
		Too acid	0.50	Shrink-swell	0.95	Rock fragments	0.75
		Droughty	0.98			Depth to bedrock	0.99
		Depth to bedrock	0.99				
Littlefir-----	40	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Depth to bedrock	0.07	Too acid	0.88
		Too acid	0.50	Shrink-swell	0.12		
		Water erosion	0.90				
73: Sherless-----	50	Fair		Poor		Fair	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.37
		Too acid	0.50	Shrink-swell	0.95	Too acid	0.59
		Droughty	0.98			Rock fragments	0.68
		Depth to bedrock	0.99			Depth to bedrock	0.99
Littlefir-----	25	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Depth to bedrock	0.07	Slope	0.37
		Too acid	0.50	Shrink-swell	0.12	Too acid	0.88
		Water erosion	0.90				
Nashoba-----	15	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.35
		Depth to bedrock	0.35			Slope	0.37
		Too acid	0.54			Too sandy	0.98
		Too sandy	0.98				
74: Sherless-----	45	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
		Too acid	0.50	Slope	0.50	Too acid	0.59
		Droughty	0.98	Shrink-swell	0.95	Rock fragments	0.68
		Depth to bedrock	0.99			Depth to bedrock	0.99

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
74: Littlefir-----	30	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.12	Depth to bedrock	0.07	Too clayey	0.00
		Too acid	0.50	Shrink-swell	0.12	Too acid	0.88
		Water erosion	0.90	Slope	0.50		
Nashoba-----	15	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Slope	0.50	Slope	0.00
		Depth to bedrock	0.35			Depth to bedrock	0.35
		Too acid	0.54			Too sandy	0.98
		Too sandy	0.98				
75: Sherless-----	60	Fair		Poor		Fair	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Too acid	0.59
		Too acid	0.50	Shrink-swell	0.95	Rock fragments	0.68
		Droughty	0.98			Depth to bedrock	0.99
		Depth to bedrock	0.99				
Nashoba-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.35
		Depth to bedrock	0.35			Too sandy	0.98
		Too acid	0.54				
		Too sandy	0.98				
76: Smithton-----	100	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to wetness	0.00	Depth to wetness	0.00
		Too acid	0.32	Low strength	0.00	Too acid	0.88
		Water erosion	0.99				
77, 78: Speer-----	95	Fair		Good		Fair	
		Low content of organic matter	0.12			Too acid	0.98
		Too acid	0.54				
79: Stelltown-----	90	Fair		Fair		Fair	
		Too acid	0.08	Depth to wetness	0.89	Too acid	0.59
		Low content of organic matter	0.12			Depth to wetness	0.89
						Rock fragments	0.95
80: Stelltown-----	90	Fair		Fair		Fair	
		Too acid	0.08	Depth to wetness	0.89	Too acid	0.59
		Low content of organic matter	0.12			Depth to wetness	0.89
						Rock fragments	0.95
						Slope	0.96

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
81, 82: Tiak-----	100	Poor		Poor		Poor	
		Low content of organic matter	0.00	Low strength	0.00	Too clayey	0.00
		Too clayey	0.00	Shrink-swell	0.23	Too acid	0.88
		Too acid	0.16				
83: Tiak-----	100	Poor		Poor		Poor	
		Low content of organic matter	0.00	Low strength	0.00	Too clayey	0.00
		Too clayey	0.00	Shrink-swell	0.23	Slope	0.37
		Too acid	0.16			Too acid	0.88
84: Tiak-----	60	Poor		Poor		Poor	
		Low content of organic matter	0.00	Low strength	0.00	Too clayey	0.00
		Too clayey	0.00	Shrink-swell	0.23	Too acid	0.88
		Too acid	0.16				
Antoine-----	40	Fair		Poor		Fair	
		Low content of organic matter	0.12	Low strength	0.00	Too acid	0.76
		Too acid	0.20	Shrink-swell	0.29		
		Water erosion	0.99				
85: Tiak-----	50	Poor		Poor		Poor	
		Low content of organic matter	0.00	Low strength	0.00	Too clayey	0.00
		Too clayey	0.00	Shrink-swell	0.23	Slope	0.37
		Too acid	0.16			Too acid	0.88
Antoine-----	40	Fair		Poor		Fair	
		Low content of organic matter	0.12	Low strength	0.00	Too acid	0.76
		Too acid	0.20	Shrink-swell	0.29	Slope	0.84
		Water erosion	0.99				
86, 87: Toine-----	95	Fair		Good		Fair	
		Low content of organic matter	0.12			Rock fragments	0.50
		Too acid	0.84				
88: Una-----	100	Poor		Poor		Poor	
		Too clayey	0.00	Depth to wetness	0.00	Too clayey	0.00
		Too acid	0.32	Low strength	0.00	Depth to wetness	0.00
		Low content of organic matter	0.50	Shrink-swell	0.12	Too acid	0.88
89: Vaughn-----	90	Fair		Good		Poor	
		Too acid	0.50			Hard to reclaim	0.00
		Low content of organic matter	0.63			(rock fragments)	
						Too acid	0.68
						Rock fragments	0.82

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
90: Vaughn-----	55	Fair Too acid Low content of organic matter	 0.50 0.63	Good		Poor Hard to reclaim (rock fragments) Too acid Rock fragments	 0.00 0.68 0.82
Pikecreek-----	35	Fair Too sandy Low content of organic matter Too acid Cobble content	 0.01 0.12 0.95 0.98	Fair Cobble content	0.62	Poor Hard to reclaim (rock fragments) Rock fragments Too sandy	 0.00 0.00 0.01
91: Water-----	100	Not rated		Not rated		Not rated	
92: Wetsaw-----	100	Fair Too clayey Low content of organic matter Too acid	 0.12 0.12 0.50	Poor Low strength Depth to wetness Shrink-swell	 0.00 0.53 0.68	Fair Too clayey Depth to wetness Too acid Rock fragments	 0.07 0.53 0.88 0.92
93: Woodall-----	100	Fair Low content of organic matter Too acid Water erosion Too sandy	 0.12 0.50 0.99 0.99	Poor Depth to wetness	0.00	Poor Depth to wetness Too acid Too sandy	 0.00 0.88 0.99
94: Woodall-----	95	Fair Low content of organic matter Too acid Water erosion Too sandy	 0.12 0.50 0.99 0.99	Poor Depth to wetness	0.00	Poor Depth to wetness Too acid Too sandy	 0.00 0.88 0.99
95: Yanush-----	90	Fair Low content of organic matter Too acid Too clayey	 0.12 0.54 0.76	Fair		Poor Rock fragments Hard to reclaim (rock fragments) Too clayey	 0.00 0.00 0.63
96: Yanush-----	90	Fair Low content of organic matter Too acid Too clayey	 0.12 0.54 0.76	Fair		Poor Rock fragments Hard to reclaim (rock fragments) Slope Too clayey	 0.00 0.00 0.37 0.63

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
97:							
Yanush-----	50	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.54			Rock fragments	0.00
		Too clayey	0.76			Hard to reclaim (rock fragments)	0.00
						Too clayey	0.63
Avant-----	35	Fair		Poor		Poor	
		Droughty	0.02	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.54	Cobble content	0.93	Depth to bedrock	0.93
		Depth to bedrock	0.93			Too acid	0.98
Bengal-----	15	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.12	Depth to bedrock	0.00	Too clayey	0.00
		Too acid	0.50	Slope	0.00	Rock fragments	0.83
		Depth to bedrock	0.97	Shrink-swell	0.19	Too acid	0.88
		Droughty	0.98			Depth to bedrock	0.97
98:							
Yanush-----	50	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.54			Rock fragments	0.00
		Too clayey	0.76			Hard to reclaim (rock fragments)	0.00
						Too clayey	0.63
Avant-----	35	Fair		Poor		Poor	
		Droughty	0.02	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.54	Cobble content	0.93	Depth to bedrock	0.93
		Depth to bedrock	0.93			Too acid	0.98
Bengal-----	15	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.50	Low strength	0.00	Rock fragments	0.79
		Depth to bedrock	0.97	Shrink-swell	0.19	Too acid	0.88
		Droughty	0.99			Depth to bedrock	0.97
99:							
Yanush-----	60	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Rock fragments	0.00
		Too clayey	0.76			Slope	0.00
						Too clayey	0.63

Soil Survey of Pike County, Arkansas

Table 13b.--Construction Materials (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
99: Bigfork-----	35	Poor		Poor		Poor	
		Droughty	0.00	Slope	0.00	Rock fragments	0.00
		Stone content	0.08	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.14
		Depth to bedrock	0.14	Stones	0.80	Too clayey	0.57
		Too acid	0.54	Cobble content	0.85	Too acid	0.98
		Cobble content	0.82	Shrink-swell	0.87		
		Too clayey	0.98				
100: Yanush-----	55	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.54			Rock fragments	0.00
		Too clayey	0.76			Hard to reclaim (rock fragments)	0.00
						Too clayey	0.63
Bigfork-----	30	Poor		Poor		Poor	
		Droughty	0.00	Slope	0.00	Slope	0.00
		Stone content	0.01	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Low strength	0.00	Depth to bedrock	0.14
		Depth to bedrock	0.14	Stones	0.68	Too clayey	0.57
		Too acid	0.54	Shrink-swell	0.87	Too acid	0.98
		Cobble content	0.97	Cobble content	0.96		
		Too clayey	0.98				
101: Zafra-----	40	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Droughty	0.29	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50			Too clayey	0.44
		Too clayey	0.76			Too acid	0.76
		Depth to bedrock	0.99			Depth to bedrock	0.99
Carnasaw-----	30	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.32	Shrink-swell	0.12	Rock fragments	0.88
		Water erosion	0.99	Depth to bedrock	0.99	Too acid	0.88
Clebit-----	20	Poor		Poor		Poor	
		Depth to bedrock	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12	Stones	0.74	Rock fragments	0.00
		Too acid	0.68	Cobble content	0.95		
		Stone content	0.74				

Soil Survey of Pike County, Arkansas

Table 14.--Water Management

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Somewhat limited Seepage	0.04	Very limited Depth to saturated zone Piping	1.00 0.19	Very limited Depth to water	1.00
2: Avilla-----	90	Somewhat limited Seepage Slope	0.72 0.08	Not limited		Very limited Depth to water	1.00
3: Avilla-----	90	Somewhat limited Seepage Slope	0.72 0.08	Not limited		Very limited Depth to water	1.00
4: Avilla-----	100	Very limited Slope Seepage	1.00 0.72	Not limited		Very limited Depth to water	1.00
5: Bengal-----	50	Very limited Slope Depth to bedrock	1.00 0.02	Somewhat limited Hard to pack Thin layer	0.48 0.61	Very limited Depth to water	1.00
Bismarck-----	20	Very limited Slope Depth to bedrock Seepage	1.00 0.61 0.02	Very limited Seepage Thin layer Large stones	1.00 1.00 0.42	Very limited Depth to water	1.00
Yanush-----	20	Very limited Slope Seepage	1.00 0.72	Not limited		Very limited Depth to water	1.00
6: Bengal-----	50	Very limited Slope Depth to bedrock	1.00 0.02	Somewhat limited Hard to pack Thin layer	0.48 0.61	Very limited Depth to water	1.00
Bismarck-----	20	Very limited Slope Depth to bedrock Seepage	1.00 0.61 0.02	Very limited Seepage Thin layer Large stones	1.00 1.00 0.42	Very limited Depth to water	1.00
Yanush-----	20	Very limited Slope Seepage	1.00 0.72	Not limited		Very limited Depth to water	1.00
7: Bengal-----	55	Very limited Slope Depth to bedrock	1.00 0.02	Somewhat limited Hard to pack Thin layer	0.48 0.61	Very limited Depth to water	1.00

Soil Survey of Pike County, Arkansas

Table 14.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7:							
Bismarck-----	25	Very limited Slope Depth to bedrock Seepage	1.00 0.61 0.02	Very limited Seepage Thin layer Large stones	1.00 1.00 0.42	Very limited Depth to water	1.00
Bigfork-----	20	Very limited Slope Seepage Depth to bedrock	1.00 0.72 0.97	Somewhat limited Large stones Thin layer	0.88 0.97	Very limited Depth to water	1.00
8:							
Bigfork-----	65	Very limited Slope Seepage Depth to bedrock	1.00 0.72 0.97	Somewhat limited Large stones Thin layer	0.91 0.97	Very limited Depth to water	1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	
9:							
Bigfork-----	45	Very limited Slope Seepage Depth to bedrock	1.00 0.72 0.97	Somewhat limited Large stones Thin layer	0.94 0.97	Very limited Depth to water	1.00
Yanush-----	30	Very limited Slope Seepage	1.00 0.72	Not limited		Very limited Depth to water	1.00
10:							
Billstown-----	85	Somewhat limited Slope	0.68	Somewhat limited Hard to pack	0.99	Very limited Depth to water	1.00
11:							
Billstown-----	90	Very limited Slope	1.00	Somewhat limited Hard to pack	0.99	Very limited Depth to water	1.00
12:							
Billstown-----	50	Very limited Slope	1.00	Somewhat limited Hard to pack	0.99	Very limited Depth to water	1.00
Tiak-----	40	Very limited Slope	1.00	Somewhat limited Hard to pack Depth to saturated zone	0.74 0.43	Very limited Slow refill Depth to saturated zone Unstable excavation walls	1.00 0.25 0.10
13:							
Bonnerdale-----	95	Very limited Seepage Slope	1.00 0.68	Very limited Depth to saturated zone Thin layer	1.00 0.03	Very limited Depth to water	1.00
14:							
Carnasaw-----	70	Very limited Slope	1.00	Somewhat limited Hard to pack	0.67	Very limited Depth to water	1.00

Soil Survey of Pike County, Arkansas

Table 14.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
14: Pirum-----	20	Very limited Slope Seepage Depth to bedrock	1.00 0.72 0.56	Somewhat limited Thin layer	0.56	Very limited Depth to water	1.00
15: Carnasaw-----	55	Very limited Slope	1.00	Somewhat limited Hard to pack	0.66	Very limited Depth to water	1.00
Sherless-----	35	Very limited Slope Seepage Depth to bedrock	1.00 0.72 0.01	Somewhat limited Thin layer	0.52	Very limited Depth to water	1.00
16: Carnasaw-----	60	Very limited Slope	1.00	Somewhat limited Hard to pack	0.67	Very limited Depth to water	1.00
Sherless-----	35	Very limited Slope Seepage Depth to bedrock	1.00 0.72 0.01	Somewhat limited Thin layer	0.52	Very limited Depth to water	1.00
17: Carnasaw-----	50	Very limited Slope	1.00	Somewhat limited Hard to pack	0.67	Very limited Depth to water	1.00
Sherwood-----	25	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.10	Somewhat limited Thin layer	0.26	Very limited Depth to water	1.00
18: Carnasaw-----	50	Very limited Slope	1.00	Somewhat limited Hard to pack	0.66	Very limited Depth to water	1.00
Zafra-----	25	Very limited Slope Seepage Depth to bedrock	1.00 0.70 0.02	Somewhat limited Thin layer Seepage	0.56 0.30	Very limited Depth to water	1.00
19: Ceda-----	90	Very limited Seepage	1.00	Somewhat limited Large stones Seepage	0.76 0.68	Very limited Depth to water	1.00
20: Ceda-----	100	Very limited Seepage	1.00	Somewhat limited Large stones Seepage	0.43 0.68	Very limited Depth to water	1.00
21: Clebit-----	40	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Seepage Thin layer Large stones	1.00 1.00 0.03	Very limited Depth to water	1.00
Carnasaw-----	35	Very limited Slope	1.00	Somewhat limited Hard to pack	0.67	Very limited Depth to water	1.00

Soil Survey of Pike County, Arkansas

Table 14.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
22: Cupco-----	90	Somewhat limited Seepage	0.54	Very limited Depth to saturated zone	1.00	Very limited Depth to water	1.00
23: Dam-----	100	Not rated		Not rated		Not rated	
24: Dela-----	95	Very limited Seepage	1.00	Not limited		Very limited Unstable excavation walls Depth to saturated zone	1.00 0.81
25: Dela-----	90	Very limited Seepage	1.00	Not limited		Very limited Unstable excavation walls Depth to saturated zone	1.00 0.81
26: Delight-----	100	Somewhat limited Slope Seepage Depth to bedrock	0.68 0.04 0.11	Somewhat limited Hard to pack Thin layer	0.99 0.85	Very limited Depth to water	1.00
27: Gurdon-----	90	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Piping	1.00 0.20	Somewhat limited Slow refill Unstable excavation walls	0.30 0.10
28: Guyton-----	100	Not limited		Very limited Depth to saturated zone Piping	1.00 0.17	Very limited Slow refill Unstable excavation walls	1.00 0.10
29: Guyton-----	100	Not limited		Very limited Depth to saturated zone Piping	1.00 0.17	Very limited Slow refill Unstable excavation walls	1.00 0.10
30: Guyton-----	100	Not limited		Very limited Depth to saturated zone Piping	1.00 0.17	Somewhat limited Slow refill Unstable excavation walls	0.30 0.10
31: Japany-----	90	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.62	Very limited Depth to water	1.00
32: Kenn-----	95	Somewhat limited Seepage	0.72	Not limited		Very limited Depth to water	1.00

Soil Survey of Pike County, Arkansas

Table 14.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
33: Kenn-----	90	Somewhat limited Seepage	0.72	Not limited		Very limited Depth to water	1.00
34: Kenn-----	90	Somewhat limited Seepage	0.72	Not limited		Very limited Depth to water	1.00
35: Kenn-----	55	Somewhat limited Seepage	0.72	Not limited		Very limited Depth to water	1.00
Ceda-----	35	Very limited Seepage	1.00	Somewhat limited Large stones Seepage	0.76 0.68	Very limited Depth to water	1.00
36: Kizzia-----	90	Somewhat limited Seepage Slope	0.72 0.32	Very limited Depth to saturated zone Piping	1.00 0.79	Very limited Depth to water	1.00
37: Leeper-----	95	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.61	Very limited Slow refill Unstable excavation walls	1.00 0.10
38: Littlefir-----	60	Somewhat limited Slope Seepage	0.32 0.04	Somewhat limited Hard to pack Thin layer	0.58 0.34	Very limited Depth to water	1.00
Carnasaw-----	30	Somewhat limited Slope	0.32	Somewhat limited Hard to pack	0.70	Very limited Depth to water	1.00
39: Magnet-----	100	Very limited Slope Seepage Depth to bedrock	1.00 0.57 0.09	Somewhat limited Thin layer	0.83	Very limited Depth to water	1.00
40: Marietta-----	95	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone	1.00	Somewhat limited Slow refill Unstable excavation walls	0.30 0.10
41: Mazarn-----	100	Somewhat limited Seepage Depth to bedrock	0.54 0.03	Very limited Depth to saturated zone Thin layer	1.00 0.66	Somewhat limited Slow refill Unstable excavation walls	0.46 0.50
42: Mazarn-----	90	Somewhat limited Seepage Depth to bedrock	0.54 0.03	Very limited Depth to saturated zone Thin layer	1.00 0.66	Somewhat limited Slow refill Unstable excavation walls	0.46 0.50

Soil Survey of Pike County, Arkansas

Table 14.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
43: McCaskill-----	95	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Depth to water	1.00
44: Mena-----	95	Somewhat limited Slope Seepage	0.08 0.04	Somewhat limited Depth to saturated zone	0.86	Very limited Depth to water	1.00
45: Mena-----	95	Very limited Slope Seepage	1.00 0.04	Somewhat limited Depth to saturated zone	0.86	Very limited Depth to water	1.00
46: Mena-----	95	Somewhat limited Slope Seepage	0.08 0.04	Somewhat limited Depth to saturated zone	0.86	Very limited Depth to water	1.00
47: Murfreesboro-----	90	Somewhat limited Seepage Slope	0.72 0.08	Somewhat limited Piping	0.07	Very limited Depth to water	1.00
48: Murfreesboro-----	90	Somewhat limited Seepage Slope	0.72 0.08	Somewhat limited Piping	0.07	Very limited Depth to water	1.00
49: Nathan-----	90	Somewhat limited Seepage Slope	0.72 0.32	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Depth to water	1.00
50: Nashoba-----	50	Very limited Seepage Slope Depth to bedrock	1.00 0.32 0.91	Very limited Seepage Thin layer	1.00 0.91	Very limited Depth to water	1.00
Bismarck-----	25	Somewhat limited Slope Depth to bedrock Seepage	0.32 0.61 0.02	Very limited Seepage Thin layer	1.00 1.00	Very limited Depth to water	1.00
Littlefir-----	20	Somewhat limited Slope Seepage	0.32 0.04	Somewhat limited Hard to pack Thin layer	0.58 0.34	Very limited Depth to water	1.00
51: Nashoba-----	50	Very limited Seepage Slope Depth to bedrock	1.00 1.00 0.91	Very limited Seepage Thin layer	1.00 0.91	Very limited Depth to water	1.00

Soil Survey of Pike County, Arkansas

Table 14.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51: Bismarck-----	25	Very limited Slope Depth to bedrock Seepage	1.00 0.61 0.02	Very limited Seepage Thin layer Large stones	1.00 1.00 0.42	Very limited Depth to water	1.00
Littlefir-----	20	Very limited Slope Seepage	1.00 0.04	Somewhat limited Hard to pack Thin layer	0.58 0.34	Very limited Depth to water	1.00
52: Nashoba-----	50	Very limited Seepage Slope Depth to bedrock	1.00 1.00 0.91	Very limited Seepage Thin layer	1.00 0.91	Very limited Depth to water	1.00
Littlefir-----	25	Very limited Slope Seepage	1.00 0.04	Somewhat limited Hard to pack Thin layer	0.53 0.34	Very limited Depth to water	1.00
53: Neff-----	95	Somewhat limited Seepage	0.04	Very limited Depth to saturated zone Piping	1.00 0.02	Very limited Depth to water	1.00
54: Ochlockonee-----	95	Very limited Seepage	1.00	Not limited		Very limited Unstable excavation walls Depth to saturated zone	1.00 0.81
55: Ochlockonee-----	95	Very limited Seepage	1.00	Not limited		Very limited Unstable excavation walls Depth to saturated zone	1.00 0.81
56: Ochlockonee-----	95	Very limited Seepage	1.00	Not limited		Very limited Depth to water	1.00
57: Ouachita-----	95	Somewhat limited Seepage	0.72	Not limited		Very limited Depth to water	1.00
58: Ouachita-----	95	Somewhat limited Seepage	0.72	Not limited		Very limited Depth to water	1.00
59: Ozan-----	100	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone	1.00	Somewhat limited Slow refill Unstable excavation walls	0.30 0.10

Soil Survey of Pike County, Arkansas

Table 14.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
60: Ozan-----	100	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone	1.00	Somewhat limited Slow refill Unstable excavation walls	0.30 0.10
61: Peanutrock-----	95	Very limited Seepage Slope	1.00 0.68	Very limited Seepage	1.00	Very limited Depth to water	1.00
62: Peanutrock-----	95	Very limited Slope Seepage	1.00 1.00	Very limited Seepage	1.00	Very limited Depth to water	1.00
63: Peanutrock-----	90	Very limited Slope Seepage	1.00 1.00	Very limited Seepage	1.00	Very limited Depth to water	1.00
64: Peanutrock-----	55	Very limited Slope Seepage	1.00 1.00	Very limited Seepage	1.00	Very limited Depth to water	1.00
Tiak-----	35	Very limited Slope	1.00	Somewhat limited Hard to pack	0.74	Very limited Depth to water	1.00
65: Pikecity-----	90	Very limited Seepage Slope	1.00 0.32	Not limited		Very limited Depth to water	1.00
66: Pikecreek-----	100	Very limited Seepage	1.00	Very limited Seepage	1.00	Very limited Depth to water	1.00
67: Pirum-----	50	Somewhat limited Seepage Slope Depth to bedrock	0.72 0.08 0.56	Somewhat limited Thin layer	0.56	Very limited Depth to water	1.00
Sherless-----	30	Somewhat limited Seepage Slope Depth to bedrock	0.72 0.68 0.01	Very limited Depth to saturated zone Thin layer	1.00 0.52	Very limited Depth to water	1.00
Bonnerdale-----	20	Very limited Seepage Slope	1.00 0.08	Very limited Depth to saturated zone Thin layer	1.00 0.03	Very limited Depth to water	1.00
68: Pits-----	60	Not rated		Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated		Not rated	

Soil Survey of Pike County, Arkansas

Table 14.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
69: Riverwash-----	60	Not rated		Not rated		Not rated	
Ceda-----	35	Very limited Seepage	1.00	Somewhat limited Large stones Seepage	0.76 0.68	Very limited Depth to water	1.00
70: Sardis-----	90	Somewhat limited Seepage	0.72	Somewhat limited Piping Depth to saturated zone	0.11 0.95	Somewhat limited Slow refill Unstable excavation walls Depth to saturated zone	0.28 0.10 0.02
71: Sardis-----	90	Somewhat limited Seepage	0.72	Somewhat limited Piping Depth to saturated zone	0.11 0.95	Somewhat limited Slow refill Unstable excavation walls Depth to saturated zone	0.28 0.10 0.02
72: Sherless-----	50	Somewhat limited Seepage Slope Depth to bedrock	0.72 0.32 0.01	Somewhat limited Thin layer	0.52	Very limited Depth to water	1.00
Littlefir-----	40	Somewhat limited Slope Seepage	0.32 0.04	Somewhat limited Hard to pack Thin layer	0.53 0.34	Very limited Depth to water	1.00
73: Sherless-----	50	Very limited Slope Seepage Depth to bedrock	1.00 0.72 0.01	Somewhat limited Thin layer	0.52	Very limited Depth to water	1.00
Littlefir-----	25	Very limited Slope Seepage	1.00 0.04	Somewhat limited Hard to pack Thin layer	0.53 0.34	Very limited Depth to water	1.00
74: Sherless-----	45	Very limited Slope Seepage Depth to bedrock	1.00 0.72 0.01	Somewhat limited Thin layer	0.52	Very limited Depth to water	1.00
Littlefir-----	30	Very limited Slope Seepage	1.00 0.04	Somewhat limited Hard to pack Thin layer	0.53 0.34	Very limited Depth to water	1.00
75: Sherless-----	60	Somewhat limited Seepage Slope Depth to bedrock	0.72 0.32 0.01	Somewhat limited Thin layer	0.52	Very limited Depth to water	1.00

Soil Survey of Pike County, Arkansas

Table 14.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
75: Nashoba-----	30	Very limited Seepage Slope Depth to bedrock	1.00 0.32 0.91	Very limited Seepage Thin layer	1.00 0.91	Very limited Depth to water	1.00
76: Smithton-----	100	Somewhat limited Seepage	0.04	Very limited Depth to saturated zone Piping	1.00 0.64	Somewhat limited Slow refill Unstable excavation walls	0.28 0.10
77: Speer-----	95	Somewhat limited Seepage	0.72	Somewhat limited Piping	0.86	Very limited Depth to water	1.00
78: Speer-----	95	Somewhat limited Seepage	0.72	Somewhat limited Piping	0.86	Very limited Depth to water	1.00
79: Stelltown-----	90	Somewhat limited Seepage Slope	0.72 0.08	Somewhat limited Depth to saturated zone	0.86	Somewhat limited Slow refill Unstable excavation walls Depth to saturated zone	0.28 0.10 0.06
80: Stelltown-----	90	Very limited Slope Seepage	1.00 0.72	Somewhat limited Depth to saturated zone	0.86	Somewhat limited Slow refill Unstable excavation walls Depth to saturated zone	0.28 0.10 0.06
81: Tiak-----	100	Somewhat limited Slope	0.32	Somewhat limited Hard to pack Depth to saturated zone	0.74 0.43	Very limited Slow refill Depth to saturated zone Unstable excavation walls	1.00 0.25 0.10
82: Tiak-----	100	Somewhat limited Slope	0.32	Somewhat limited Hard to pack Depth to saturated zone	0.74 0.43	Very limited Slow refill Depth to saturated zone Unstable excavation walls	1.00 0.25 0.10
83: Tiak-----	100	Very limited Slope	1.00	Somewhat limited Hard to pack Depth to saturated zone	0.74 0.43	Very limited Slow refill Depth to saturated zone Unstable excavation walls	1.00 0.25 0.10

Soil Survey of Pike County, Arkansas

Table 14.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
84: Tiak-----	60	Somewhat limited Slope	0.32	Somewhat limited Hard to pack Depth to saturated zone	0.74 0.43	Very limited Slow refill Depth to saturated zone Unstable excavation walls	1.00 0.25 0.10
Antoine-----	40	Somewhat limited Slope Seepage	0.08 0.04	Somewhat limited Piping	0.19	Very limited Depth to water	1.00
85: Tiak-----	50	Very limited Slope	1.00	Somewhat limited Hard to pack Depth to saturated zone	0.74 0.43	Very limited Slow refill Depth to saturated zone Unstable excavation walls	1.00 0.25 0.10
Antoine-----	40	Very limited Slope Seepage	1.00 0.04	Somewhat limited Piping	0.19	Very limited Depth to water	1.00
86: Toine-----	95	Somewhat limited Seepage	0.72	Not limited		Very limited Depth to water	1.00
87: Toine-----	95	Somewhat limited Seepage	0.72	Not limited		Very limited Depth to water	1.00
88: Una-----	100	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 0.72	Very limited Slow refill Unstable excavation walls	1.00 0.10
89: Vaughn-----	90	Very limited Seepage	1.00	Somewhat limited Seepage	0.32	Very limited Depth to water	1.00
90: Vaughn-----	55	Very limited Seepage	1.00	Somewhat limited Seepage	0.32	Very limited Depth to water	1.00
Pikecreek-----	35	Very limited Seepage	1.00	Very limited Seepage	1.00	Very limited Depth to water	1.00
91: Water-----	100	Not rated		Not rated		Not rated	
92: Wetsaw-----	100	Somewhat limited Seepage Slope	0.72 0.08	Very limited Depth to saturated zone	1.00	Somewhat limited Slow refill Unstable excavation walls	0.28 0.10

Soil Survey of Pike County, Arkansas

Table 14.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
93: Woodall-----	100	Somewhat limited Seepage	0.03	Very limited Depth to saturated zone Piping	1.00 1.00	Somewhat limited Slow refill Unstable excavation walls	0.30 0.10
94: Woodall-----	95	Somewhat limited Seepage	0.03	Very limited Depth to saturated zone Piping	1.00 1.00	Somewhat limited Slow refill Unstable excavation walls	0.30 0.10
95: Yanush-----	90	Somewhat limited Seepage Slope	0.72 0.32	Not limited		Very limited Depth to water	1.00
96: Yanush-----	90	Very limited Slope Seepage	1.00 0.72	Not limited		Very limited Depth to water	1.00
97: Yanush-----	50	Very limited Slope Seepage	1.00 0.72	Not limited		Very limited Depth to water	1.00
Avant-----	35	Very limited Slope Seepage Depth to bedrock	1.00 0.72 0.03	Somewhat limited Thin layer	0.66	Very limited Depth to water	1.00
98: Yanush-----	50	Very limited Slope Seepage	1.00 0.72	Not limited		Very limited Depth to water	1.00
Avant-----	35	Very limited Slope Seepage Depth to bedrock	1.00 0.72 0.03	Somewhat limited Thin layer	0.66	Very limited Depth to water	1.00
99: Yanush-----	60	Very limited Slope Seepage	1.00 0.72	Not limited		Very limited Depth to water	1.00
Bigfork-----	35	Very limited Slope Seepage Depth to bedrock	1.00 0.72 0.97	Somewhat limited Large stones Thin layer	0.93 0.97	Very limited Depth to water	1.00
100: Yanush-----	55	Very limited Slope Seepage	1.00 0.72	Not limited		Very limited Depth to water	1.00
Bigfork-----	30	Very limited Slope Seepage Depth to bedrock	1.00 0.72 0.97	Somewhat limited Large stones Thin layer	0.82 0.97	Very limited Depth to water	1.00

Soil Survey of Pike County, Arkansas

Table 14.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
101: Zafra-----	40	Very limited Slope Seepage Depth to bedrock	 1.00 0.70 0.02	Somewhat limited Thin layer Seepage	 0.56 0.30	Very limited Depth to water	 1.00
Carnasaw-----	30	Very limited Slope	 1.00	Somewhat limited Hard to pack	 0.66	Very limited Depth to water	 1.00
Clebit-----	20	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Seepage Thin layer Large stones	 1.00 1.00 0.03	Very limited Depth to water	 1.00

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Very limited Slow water movement Depth to saturated zone Too acid	1.00 0.99 0.50	Very limited Slow water movement Too acid Depth to saturated zone	1.00 0.99 0.99
2, 3: Avilla-----	90	Somewhat limited Too acid	0.11	Somewhat limited Too acid	0.42
4: Avilla-----	100	Somewhat limited Too acid Slope	0.11 0.04	Somewhat limited Too acid Slope	0.42 0.04
5: Bengal-----	50	Very limited Large stones Slow water movement Slope Too acid Cobble content	1.00 1.00 0.63 0.32 0.12	Very limited Slow water movement Too acid Slope Cobble content Depth to bedrock	1.00 0.91 0.63 0.12 0.03
Bismarck-----	20	Very limited Droughty Large stones Depth to bedrock Cobble content Slope	1.00 1.00 1.00 1.00 0.63	Very limited Droughty Depth to bedrock Cobble content Too acid Slope	1.00 1.00 1.00 0.91 0.63
Yanush-----	20	Very limited Large stones Slope Cobble content Too acid	1.00 0.63 0.24 0.03	Somewhat limited Slope Cobble content Too acid	0.63 0.24 0.14
6: Bengal-----	50	Very limited Too steep Large stones Slow water movement Too acid Cobble content	1.00 1.00 1.00 0.32 0.12	Very limited Too steep Slow water movement Too acid Cobble content Depth to bedrock	1.00 1.00 0.91 0.12 0.03
Bismarck-----	20	Very limited Too steep Droughty Large stones Depth to bedrock Cobble content	1.00 1.00 1.00 1.00 1.00	Very limited Droughty Too steep Depth to bedrock Cobble content Too acid	1.00 1.00 1.00 1.00 0.91

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
6: Yanush-----	20	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Cobble content	0.24
		Cobble content	0.24	Too acid	0.14
		Too acid	0.03		
7: Bengal-----	55	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Slow water	1.00
		Slow water	1.00	movement	
		Cobble content	1.00	Cobble content	1.00
		Too acid	0.32	Too acid	0.91
				Depth to bedrock	0.03
Bismarck-----	25	Very limited		Very limited	
		Too steep	1.00	Droughty	1.00
		Droughty	1.00	Too steep	1.00
		Large stones	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Cobble content	1.00
		Cobble content	1.00	Too acid	0.91
Bigfork-----	20	Very limited		Very limited	
		Too steep	1.00	Cobble content	1.00
		Cobble content	1.00	Too steep	1.00
		Large stones	1.00	Droughty	1.00
		Droughty	1.00	Too acid	0.91
		Depth to bedrock	0.86	Depth to bedrock	0.86
8: Bigfork-----	65	Very limited		Very limited	
		Large stones on	1.00	Large stones on	1.00
		the surface		the surface	
		Large stones	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	0.86
		Depth to bedrock	0.86	Too acid	0.42
		Too acid	0.11	Slope	0.04
Rock outcrop-----	25	Not rated		Not rated	
9: Bigfork-----	45	Very limited		Very limited	
		Too steep	1.00	Large stones on	1.00
		Large stones on	1.00	the surface	
		the surface		Too steep	1.00
		Large stones	1.00	Droughty	1.00
		Droughty	1.00	Too acid	0.91
		Depth to bedrock	0.86	Depth to bedrock	0.86
Yanush-----	30	Very limited		Very limited	
		Too steep	1.00	Large stones on	1.00
		Large stones on	1.00	the surface	
		the surface		Too steep	1.00
		Large stones	1.00	Too acid	0.14
		Cobble content	0.12	Cobble content	0.12
		Too acid	0.03		
Rock outcrop-----	15	Not rated		Not rated	

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
10: Billstown-----	85	Very limited Slow water movement	1.00	Very limited Slow water movement	1.00
		Runoff	0.40	Too acid	0.91
		Too acid	0.32		
11: Billstown-----	90	Very limited Slow water movement	1.00	Very limited Slow water movement	1.00
		Slope	0.63	Too acid	0.91
		Runoff	0.40	Slope	0.63
		Too acid	0.32		
12: Billstown-----	50	Very limited Slow water movement	1.00	Very limited Slow water movement	1.00
		Slope	0.63	Too acid	0.91
		Runoff	0.40	Slope	0.63
		Too acid	0.32		
Tiak-----	40	Very limited Slow water movement	1.00	Very limited Slow water movement	1.00
		Slope	0.63	Too acid	0.91
		Depth to saturated zone	0.43	Slope	0.63
		Too acid	0.32	Depth to saturated zone	0.43
13: Bonnerdale-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Slow water movement	1.00	Slow water movement	1.00
		Too acid	0.73	Too acid	1.00
14: Carnasaw-----	70	Very limited Large stones	1.00	Very limited Slow water	1.00
		Slow water movement	1.00	movement	
		Cobble content	0.40	Too acid	0.91
		Too acid	0.32	Cobble content	0.40
		Slope	0.04	Slope	0.04
				Large stones on the surface	0.02
Pirum-----	20	Very limited Large stones	1.00	Very limited Large stones on	1.00
		Large stones on the surface	1.00	the surface	
		Too acid	0.50	Too acid	0.99
		Slow water movement	0.41	Slow water movement	0.31
		Slope	0.04	Slope	0.04
				Droughty	0.04

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
15:					
Carnasaw-----	55	Very limited		Very limited	
		Slow water	1.00	Slow water	1.00
		movement		movement	
		Slope	0.63	Too acid	0.91
		Cobble content	0.59	Slope	0.63
		Too acid	0.32	Cobble content	0.59
Sherless-----	35	Very limited		Very limited	
		Slow water	1.00	Slow water	1.00
		movement		movement	
		Cobble content	0.87	Too acid	1.00
		Too acid	0.73	Cobble content	0.87
		Slope	0.63	Slope	0.63
		Droughty	0.02	Droughty	0.02
16:					
Carnasaw-----	60	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Slow water	1.00
		Slow water	1.00	movement	
		movement		Too acid	0.91
		Cobble content	0.59	Cobble content	0.59
		Too acid	0.32	Large stones on the surface	0.02
Sherless-----	35	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Slow water	1.00
		Slow water	1.00	movement	
		movement		Too acid	1.00
		Cobble content	0.87	Cobble content	0.87
		Too acid	0.73	Droughty	0.02
17:					
Carnasaw-----	50	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Slow water	1.00
		Slow water	1.00	movement	
		movement		Too acid	0.91
		Cobble content	0.87	Cobble content	0.87
		Too acid	0.32		
Sherwood-----	25	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Too acid	0.91
		Too acid	0.32	Cobble content	0.12
		Cobble content	0.12		
Zafra-----	15	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Droughty	0.95
		Droughty	0.95	Cobble content	0.87
		Cobble content	0.87	Too acid	0.67
		Depth to bedrock	0.42	Depth to bedrock	0.42

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
18:					
Carnasaw-----	50	Very limited		Very limited	
		Too steep	1.00	Large stones on	1.00
		Large stones on	1.00	the surface	
		the surface		Too steep	1.00
		Large stones	1.00	Slow water	1.00
		Slow water	1.00	movement	
		movement		Too acid	0.91
		Too acid	0.32		
Zafra-----	25	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Large stones on	1.00
		Large stones on	1.00	the surface	
		the surface		Droughty	0.71
		Droughty	0.71	Too acid	0.67
		Too acid	0.18	Depth to bedrock	0.01
Clebit-----	15	Very limited		Very limited	
		Too steep	1.00	Droughty	1.00
		Slow water	1.00	Slow water	1.00
		movement		movement	
		Large stones on	1.00	Large stones on	1.00
		the surface		the surface	
		Droughty	1.00	Too steep	1.00
		Large stones	1.00	Depth to bedrock	1.00
19:					
Ceda-----	90	Very limited		Very limited	
		Filtering	1.00	Filtering	1.00
		capacity		capacity	
		Flooding	1.00	Flooding	1.00
		Cobble content	1.00	Cobble content	1.00
		Too acid	0.03	Too acid	0.14
20:					
Ceda-----	100	Very limited		Very limited	
		Filtering	1.00	Filtering	1.00
		capacity		capacity	
		Flooding	1.00	Flooding	1.00
		Cobble content	1.00	Cobble content	1.00
		Too acid	0.03	Too acid	0.14
21:					
Clebit-----	40	Very limited		Very limited	
		Slow water	1.00	Droughty	1.00
		movement		Slow water	1.00
		Large stones on	1.00	movement	
		the surface		Large stones on	1.00
		Droughty	1.00	the surface	
		Large stones	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Cobble content	0.95
Carnasaw-----	35	Very limited		Very limited	
		Large stones on	1.00	Large stones on	1.00
		the surface		the surface	
		Large stones	1.00	Slow water	1.00
		Slow water	1.00	movement	
		movement		Too acid	0.91
		Too acid	0.32	Slope	0.04
		Slope	0.04		

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
21: Pirum-----	15	Very limited Large stones Large stones on the surface Too acid Slow water movement Droughty	 1.00 1.00 0.50 0.41 0.04	Very limited Large stones on the surface Too acid Slow water movement Droughty Slope	 1.00 0.99 0.31 0.04 0.04
22: Cupco-----	90	Very limited Depth to saturated zone Slow water movement Too acid	 1.00 0.41 0.22	Very limited Depth to saturated zone Too acid Flooding Slow water movement	 1.00 0.77 0.40 0.31
23: Dam-----	100	Not rated		Not rated	
24: Dela-----	95	Somewhat limited Flooding Too acid	 0.60 0.02	Very limited Flooding Too acid	 1.00 0.07
25: Dela-----	90	Very limited Flooding Too acid	 1.00 0.02	Very limited Flooding Too acid	 1.00 0.07
26: Delight-----	100	Somewhat limited Depth to bedrock Slow water movement Droughty	 0.42 0.41 0.25	Somewhat limited Depth to bedrock Slow water movement Droughty	 0.42 0.31 0.25
27: Gurdon-----	90	Very limited Depth to saturated zone Flooding Too acid	 1.00 0.60 0.18	Very limited Depth to saturated zone Flooding Too acid	 1.00 1.00 0.67
28: Guyton-----	100	Very limited Slow water movement Depth to saturated zone Runoff Too acid Sodium content	 1.00 1.00 0.40 0.18 0.08	Very limited Depth to saturated zone Slow water movement Too acid Flooding Sodium content	 1.00 1.00 0.67 0.40 0.08

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
29: Guyton-----	100	Very limited Slow water movement Depth to saturated zone Flooding Runoff Too acid	 1.00 1.00 0.60 0.40 0.18	Very limited Depth to saturated zone Flooding Slow water movement Too acid Sodium content	 1.00 1.00 1.00 0.67 0.08
30: Guyton-----	100	Very limited Slow water movement Depth to saturated zone Ponding Runoff Too acid	 1.00 1.00 1.00 0.40 0.18	Very limited Depth to saturated zone Slow water movement Ponding Too acid Sodium content	 1.00 1.00 1.00 0.67 0.08
31: Japany-----	90	Very limited Slow water movement Depth to saturated zone Runoff Too acid	 1.00 1.00 0.40 0.01	Very limited Slow water movement Depth to saturated zone Too acid	 1.00 1.00 0.03
32: Kenn-----	95	Somewhat limited Too acid	 0.11	Somewhat limited Too acid Flooding	 0.42 0.40
33: Kenn-----	90	Somewhat limited Flooding Too acid	 0.60 0.11	Very limited Flooding Too acid	 1.00 0.42
34: Kenn-----	90	Very limited Flooding Too acid	 1.00 0.11	Very limited Flooding Too acid	 1.00 0.42
35: Kenn-----	55	Very limited Flooding Cobble content Too acid	 1.00 0.18 0.11	Very limited Flooding Too acid Cobble content	 1.00 0.42 0.18
Ceda-----	35	Very limited Filtering capacity Flooding Cobble content Too acid	 1.00 1.00 1.00 0.03	Very limited Filtering capacity Flooding Cobble content Too acid	 1.00 1.00 1.00 0.14

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
36: Kizzia-----	90	Somewhat limited Depth to saturated zone Too acid	0.99 0.05	Somewhat limited Depth to saturated zone Too acid	0.99 0.21
37: Leeper-----	95	Very limited Slow water movement Depth to saturated zone Flooding Runoff	1.00 1.00 0.60 0.40	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 1.00
38: Littlefir-----	60	Very limited Slow water movement Too acid	1.00 0.32	Very limited Slow water movement Too acid	1.00 0.91
Carnasaw-----	30	Very limited Slow water movement Too acid	1.00 0.32	Very limited Slow water movement Too acid	1.00 0.91
39: Magnet-----	100	Very limited Too steep Large stones on the surface Slow water movement Depth to bedrock Droughty	1.00 1.00 0.50 0.35 0.31	Very limited Large stones on the surface Too steep Too acid Slow water movement Depth to bedrock	1.00 1.00 0.77 0.37 0.35
40: Marietta-----	95	Very limited Depth to saturated zone Flooding	1.00 0.60	Very limited Depth to saturated zone Flooding	1.00 1.00
41: Mazarn-----	100	Very limited Depth to saturated zone Too acid Slow water movement Depth to bedrock	1.00 0.50 0.41 0.06	Very limited Depth to saturated zone Too acid Slow water movement Depth to bedrock	1.00 0.99 0.31 0.06
42: Mazarn-----	90	Very limited Depth to saturated zone Flooding Too acid Slow water movement Depth to bedrock	1.00 0.60 0.50 0.41 0.06	Very limited Depth to saturated zone Flooding Too acid Slow water movement Depth to bedrock	1.00 1.00 0.99 0.31 0.06

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Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
43: McCaskill-----	95	Very limited Depth to saturated zone Dense layer Slow water movement Too acid	1.00 1.00 0.41 0.37	Very limited Depth to saturated zone Too acid Slow water movement Flooding	1.00 0.96 0.31 0.20
44: Mena-----	95	Very limited Slow water movement Depth to saturated zone Too acid	1.00 0.86 0.32	Very limited Slow water movement Too acid Depth to saturated zone	1.00 0.91 0.86
45: Mena-----	95	Very limited Slow water movement Depth to saturated zone Too acid Slope	1.00 0.86 0.32 0.04	Very limited Slow water movement Too acid Depth to saturated zone Slope	1.00 0.91 0.86 0.04
46: Mena-----	95	Very limited Slow water movement Depth to saturated zone Too acid	1.00 0.86 0.32	Very limited Slow water movement Too acid Depth to saturated zone	1.00 0.91 0.86
47, 48: Murfreesboro-----	90	Somewhat limited Too acid	0.11	Somewhat limited Too acid	0.42
49: Nathan-----	90	Somewhat limited Depth to saturated zone Too acid	0.99 0.22	Somewhat limited Depth to saturated zone Too acid	0.99 0.77
50: Nashoba-----	50	Very limited Droughty Depth to bedrock Too acid	1.00 0.65 0.18	Very limited Droughty Too acid Depth to bedrock	1.00 0.67 0.65
Bismarck-----	25	Very limited Droughty Depth to bedrock Runoff Too acid	1.00 1.00 0.40 0.32	Very limited Droughty Depth to bedrock Too acid	1.00 1.00 0.91
Littlefir-----	20	Very limited Slow water movement Too acid	1.00 0.50	Very limited Slow water movement Too acid	1.00 0.99

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Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
51:					
Nashoba-----	50	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Cobble content	0.68	Cobble content	0.68
		Depth to bedrock	0.65	Too acid	0.67
		Slope	0.63	Depth to bedrock	0.65
		Runoff	0.40	Slope	0.63
Bismarck-----	25	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Cobble content	1.00	Cobble content	1.00
		Slope	0.63	Too acid	0.91
		Too acid	0.32	Slope	0.63
Littlefir-----	20	Very limited		Very limited	
		Slow water	1.00	Slow water	1.00
		movement		movement	
		Slope	0.63	Too acid	0.99
		Too acid	0.50	Slope	0.63
		Cobble content	0.18	Cobble content	0.18
52:					
Nashoba-----	50	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Large stones on	1.00
		Large stones on	1.00	the surface	
		the surface		Droughty	1.00
		Droughty	1.00	Too acid	0.67
		Depth to bedrock	0.65	Depth to bedrock	0.65
Littlefir-----	25	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Large stones on	1.00
		Large stones on	1.00	the surface	
		the surface		Slow water	1.00
		Slow water	1.00	movement	
		movement		Too acid	0.91
		Too acid	0.32		
Sherless-----	15	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Large stones on	1.00
		Large stones on	1.00	the surface	
		the surface		Slow water	1.00
		Slow water	1.00	movement	
		movement		Too acid	0.91
		Too acid	0.32	Depth to bedrock	0.01
53:					
Neff-----	95	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Flooding	0.60	Flooding	1.00
		Slow water	0.41	Too acid	0.91
		movement		Slow water	0.31
		Too acid	0.32	movement	

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Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
54: Ochlockonee-----	95	Somewhat limited Too acid	0.22	Somewhat limited Too acid Flooding	0.77 0.40
55: Ochlockonee-----	95	Somewhat limited Flooding Too acid	0.60 0.22	Very limited Flooding Too acid	1.00 0.77
56: Ochlockonee-----	95	Very limited Flooding Too acid	1.00 0.22	Very limited Flooding Too acid	1.00 0.77
57: Ouachita-----	95	Somewhat limited Slow water movement Too acid	0.41 0.32	Somewhat limited Too acid Flooding Slow water movement	0.91 0.40 0.31
58: Ouachita-----	95	Somewhat limited Flooding Slow water movement Too acid	0.60 0.41 0.32	Very limited Flooding Too acid Slow water movement	1.00 0.91 0.31
59: Ozan-----	100	Very limited Depth to saturated zone Runoff Too acid Low adsorption	1.00 0.40 0.32 0.02	Very limited Depth to saturated zone Too acid Flooding	1.00 0.91 0.40
60: Ozan-----	100	Very limited Depth to saturated zone Flooding Runoff Too acid Low adsorption	1.00 0.60 0.40 0.32 0.02	Very limited Depth to saturated zone Flooding Too acid	1.00 1.00 0.91
61: Peanutrock-----	95	Somewhat limited Too acid	0.50	Somewhat limited Too acid	0.99
62: Peanutrock-----	95	Somewhat limited Slope Too acid	0.63 0.50	Somewhat limited Too acid Slope	0.99 0.63
63: Peanutrock-----	90	Very limited Too steep Too acid	1.00 0.50	Very limited Too steep Too acid	1.00 0.99

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
64: Peanutrock-----	55	Somewhat limited Slope Too acid	0.63 0.50	Somewhat limited Too acid Slope	0.99 0.63
Tiak-----	35	Very limited Slow water movement Slope Too acid	1.00 0.63 0.32	Very limited Slow water movement Too acid Slope	1.00 0.91 0.63
65: Pikecity-----	90	Somewhat limited Low adsorption Too acid	0.98 0.50	Somewhat limited Too acid Low adsorption	0.99 0.65
66: Pikecreek-----	100	Very limited Filtering capacity Flooding Too acid Cobble content	1.00 1.00 0.03 0.01	Very limited Filtering capacity Flooding Too acid Cobble content	1.00 1.00 0.14 0.01
67: Pirum-----	50	Somewhat limited Too acid Slow water movement Droughty Depth to bedrock	0.50 0.41 0.04 0.01	Somewhat limited Too acid Slow water movement Droughty Depth to bedrock	0.99 0.31 0.04 0.01
Sherless-----	30	Very limited Depth to saturated zone Slow water movement Too acid Droughty Depth to bedrock	1.00 1.00 0.73 0.02 0.01	Very limited Depth to saturated zone Slow water movement Too acid Droughty Depth to bedrock	1.00 1.00 1.00 0.02 0.01
Bonnerdale-----	20	Very limited Depth to saturated zone Slow water movement Too acid	1.00 1.00 0.73	Very limited Depth to saturated zone Slow water movement Too acid	1.00 1.00 1.00
68: Pits-----	60	Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated	

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Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
69: Riverwash-----	60	Not rated		Not rated	
Ceda-----	35	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Flooding	1.00	Flooding	1.00
		Cobble content	1.00	Cobble content	1.00
		Too acid	0.03	Too acid	0.14
70: Sardis-----	90	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.95	Depth to saturated zone	0.95
		Too acid	0.32	Too acid	0.91
				Flooding	0.40
71: Sardis-----	90	Somewhat limited		Very limited	
		Depth to saturated zone	0.95	Flooding	1.00
		Flooding	0.60	Depth to saturated zone	0.95
		Too acid	0.32	Too acid	0.91
72: Sherless-----	50	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Too acid	0.73	Too acid	1.00
		Droughty	0.02	Droughty	0.02
		Depth to bedrock	0.01	Depth to bedrock	0.01
Littlefir-----	40	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Too acid	0.32	Too acid	0.91
73: Sherless-----	50	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Cobble content	0.87	Too acid	1.00
		Too acid	0.73	Cobble content	0.87
		Slope	0.63	Slope	0.63
		Droughty	0.02	Droughty	0.02
Littlefir-----	25	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Cobble content	0.68	Too acid	0.91
		Slope	0.63	Cobble content	0.68
		Too acid	0.32	Slope	0.63
Nashoba-----	15	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Cobble content	0.68	Cobble content	0.68
		Depth to bedrock	0.65	Too acid	0.67
		Slope	0.63	Depth to bedrock	0.65
		Too acid	0.18	Slope	0.63

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
74: Sherless-----	45	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Slow water movement	1.00	Slow water movement	1.00
		Cobble content	0.87	Too acid	1.00
		Too acid	0.73	Cobble content	0.87
		Droughty	0.02	Droughty	0.02
Littlefir-----	30	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Slow water movement	1.00	Slow water movement	1.00
		Cobble content	0.68	Too acid	0.91
		Too acid	0.32	Cobble content	0.68
Nashoba-----	15	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00
		Droughty	1.00	Droughty	1.00
		Depth to bedrock	0.65	Too acid	0.67
		Too acid	0.18	Depth to bedrock	0.65
75: Sherless-----	60	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Cobble content	0.87	Too acid	1.00
		Too acid	0.73	Cobble content	0.87
		Large stones	0.19	Droughty	0.02
		Droughty	0.02	Depth to bedrock	0.01
Nashoba-----	30	Very limited		Very limited	
		Large stones	1.00	Droughty	1.00
		Droughty	1.00	Cobble content	0.68
		Cobble content	0.68	Too acid	0.67
		Depth to bedrock	0.65	Depth to bedrock	0.65
		Too acid	0.18		
76: Smithton-----	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.50	Too acid	0.99
		Slow water movement	0.41	Slow water movement	0.31
		Runoff	0.40		
77: Speer-----	95	Somewhat limited		Very limited	
		Flooding	0.60	Flooding	1.00
		Too acid	0.02	Too acid	0.07
78: Speer-----	95	Somewhat limited		Somewhat limited	
		Too acid	0.02	Flooding	0.40
				Too acid	0.07

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
79: Stelltown-----	90	Somewhat limited Depth to saturated zone Too acid	0.86 0.43	Somewhat limited Too acid Depth to saturated zone	0.99 0.86
80: Stelltown-----	90	Somewhat limited Depth to saturated zone Too acid Slope	0.86 0.43 0.04	Somewhat limited Too acid Depth to saturated zone Slope	0.99 0.86 0.04
81, 82: Tiak-----	100	Very limited Slow water movement Depth to saturated zone Too acid	1.00 0.43 0.32	Very limited Slow water movement Too acid Depth to saturated zone	1.00 0.91 0.43
83: Tiak-----	100	Very limited Slow water movement Slope Depth to saturated zone Too acid	1.00 0.63 0.43 0.32	Very limited Slow water movement Too acid Slope Depth to saturated zone	1.00 0.91 0.63 0.43
84: Tiak-----	60	Very limited Slow water movement Depth to saturated zone Too acid	1.00 0.43 0.32	Very limited Slow water movement Too acid Depth to saturated zone	1.00 0.91 0.43
Antoine-----	40	Very limited Slow water movement Too acid	1.00 0.50	Very limited Slow water movement Too acid	1.00 0.99
85: Tiak-----	50	Very limited Slow water movement Slope Depth to saturated zone Too acid	1.00 0.63 0.43 0.32	Very limited Slow water movement Too acid Slope Depth to saturated zone	1.00 0.91 0.63 0.43
Antoine-----	40	Very limited Slow water movement Too acid Slope	1.00 0.50 0.16	Very limited Slow water movement Too acid Slope	1.00 0.99 0.16

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
86: Toine-----	95	Somewhat limited Too acid	0.11	Somewhat limited Too acid Flooding	0.42 0.40
87: Toine-----	95	Somewhat limited Flooding Too acid	0.60 0.11	Very limited Flooding Too acid	1.00 0.42
88: Una-----	100	Very limited Slow water movement Depth to saturated zone Flooding Too acid Runoff	1.00 1.00 0.60 0.50 0.40	Very limited Slow water movement Depth to saturated zone Flooding Too acid	1.00 1.00 1.00 0.99
89: Vaughn-----	90	Somewhat limited Flooding Too acid	0.60 0.14	Very limited Flooding Too acid	1.00 0.55
90: Vaughn-----	55	Very limited Flooding Too acid	1.00 0.14	Very limited Flooding Too acid	1.00 0.55
Pikecreek-----	35	Very limited Filtering capacity Flooding Too acid Cobble content	1.00 1.00 0.03 0.01	Very limited Filtering capacity Flooding Too acid Cobble content	1.00 1.00 0.14 0.01
91: Water-----	100	Not rated		Not rated	
92: Wetsaw-----	100	Very limited Slow water movement Depth to saturated zone Too acid	1.00 0.99 0.11	Very limited Slow water movement Depth to saturated zone Too acid	1.00 0.99 0.42
93: Woodall-----	100	Very limited Depth to saturated zone Flooding Slow water movement Too acid Runoff	1.00 0.60 0.50 0.50 0.40	Very limited Depth to saturated zone Flooding Too acid Slow water movement	1.00 1.00 0.99 0.37

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
94: Woodall-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Flooding	0.60	Flooding	1.00
		Slow water movement	0.50	Too acid	0.99
		Too acid	0.50	Slow water movement	0.37
		Runoff	0.40		
95: Yanush-----	90	Somewhat limited Too acid	0.03	Somewhat limited Too acid	0.14
96: Yanush-----	90	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63
		Too acid	0.03	Too acid	0.14
97: Yanush-----	50	Very limited Too steep	1.00	Very limited Cobble content	1.00
		Cobble content	1.00	Too steep	1.00
		Too acid	0.03	Too acid	0.14
Avant-----	35	Very limited Too steep	1.00	Very limited Too steep	1.00
		Cobble content	1.00	Cobble content	1.00
		Droughty	0.98	Droughty	0.98
		Too acid	0.32	Too acid	0.91
		Depth to bedrock	0.06	Depth to bedrock	0.06
Bengal-----	15	Very limited Too steep	1.00	Very limited Too steep	1.00
		Slow water movement	1.00	Slow water movement	1.00
		Cobble content	1.00	Cobble content	1.00
		Too acid	0.32	Too acid	0.91
		Depth to bedrock	0.03	Depth to bedrock	0.03
98: Yanush-----	50	Very limited Too steep	1.00	Very limited Too steep	1.00
		Cobble content	0.24	Cobble content	0.24
		Too acid	0.03	Too acid	0.14
Avant-----	35	Very limited Too steep	1.00	Very limited Too steep	1.00
		Cobble content	1.00	Cobble content	1.00
		Droughty	0.98	Droughty	0.98
		Too acid	0.32	Too acid	0.91
		Depth to bedrock	0.06	Depth to bedrock	0.06
Bengal-----	15	Very limited Too steep	1.00	Very limited Too steep	1.00
		Cobble content	1.00	Cobble content	1.00
		Slow water movement	1.00	Slow water movement	1.00
		Too acid	0.32	Too acid	0.91
		Depth to bedrock	0.03	Depth to bedrock	0.03

Soil Survey of Pike County, Arkansas

Table 15a.--Agricultural Waste Management (Part 1)--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
99:					
Yanush-----	60	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Too acid	0.14
		Too acid	0.03		
Bigfork-----	35	Very limited		Very limited	
		Too steep	1.00	Cobble content	1.00
		Cobble content	1.00	Too steep	1.00
		Large stones	1.00	Droughty	1.00
		Droughty	1.00	Too acid	0.91
		Depth to bedrock	0.86	Depth to bedrock	0.86
100:					
Yanush-----	55	Very limited		Very limited	
		Too steep	1.00	Large stones on	1.00
		Large stones on	1.00	the surface	
		the surface		Too steep	1.00
		Large stones	1.00	Too acid	0.14
		Cobble content	0.12	Cobble content	0.12
		Too acid	0.03		
Bigfork-----	30	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Large stones on	1.00
		Large stones on	1.00	the surface	
		the surface		Droughty	1.00
		Droughty	1.00	Too acid	0.91
		Depth to bedrock	0.86	Depth to bedrock	0.86
101:					
Zafra-----	40	Very limited		Very limited	
		Too steep	1.00	Large stones on	1.00
		Large stones on	1.00	the surface	
		the surface		Too steep	1.00
		Large stones	1.00	Droughty	0.71
		Droughty	0.71	Too acid	0.67
		Too acid	0.18	Depth to bedrock	0.01
Carnasaw-----	30	Very limited		Very limited	
		Too steep	1.00	Too steep	1.00
		Large stones	1.00	Slow water	1.00
		Slow water	1.00	movement	
		movement		Large stones on	1.00
		Large stones on	1.00	the surface	
		the surface		Too acid	0.91
		Too acid	0.32		
Clebit-----	20	Very limited		Very limited	
		Too steep	1.00	Droughty	1.00
		Slow water	1.00	Slow water	1.00
		movement		movement	
		Large stones on	1.00	Large stones on	1.00
		the surface		the surface	
		Droughty	1.00	Too steep	1.00
		Large stones	1.00	Depth to bedrock	1.00

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Very limited Slow water movement Too acid Depth to saturated zone	1.00 0.99 0.99	Very limited Seepage Too acid Depth to saturated zone	1.00 0.99 0.99
2, 3: Avilla-----	90	Somewhat limited Too acid Too steep for surface application	0.42 0.08	Very limited Seepage Too acid	1.00 0.42
4: Avilla-----	100	Very limited Too steep for surface application Too acid Too steep for sprinkler application	1.00 0.42 0.22	Very limited Seepage Too steep for surface application Too acid	1.00 0.50 0.42
5: Bengal-----	50	Very limited Too steep for surface application Slow water movement Too acid Too steep for sprinkler application Cobble content	1.00 1.00 0.91 0.78 0.12	Very limited Seepage Depth to bedrock Too steep for surface application Too acid	1.00 1.00 1.00 0.91
Bismarck-----	20	Very limited Droughty Too steep for surface application Depth to bedrock Cobble content Too acid	1.00 1.00 1.00 1.00 0.91	Very limited Seepage Depth to bedrock Too steep for surface application Too acid Cobble content	1.00 1.00 1.00 0.91 0.84

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5: Yanush-----	20	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	0.78	Too steep for surface application	1.00
		Cobble content	0.24	Too acid	0.14
		Too acid	0.14		
6: Bengal-----	50	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Depth to bedrock	1.00
		Too acid	0.91	Too acid	0.91
		Cobble content	0.12		
Bismarck-----	20	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too acid	0.91
		Cobble content	1.00	Cobble content	0.84
Yanush-----	20	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Cobble content	0.24	Too acid	0.14
		Too acid	0.14		
7: Bengal-----	55	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Depth to bedrock	1.00
		Cobble content	1.00	Too acid	0.91
		Too acid	0.91		

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
7: Bismarck-----	25	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Cobble content	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Too acid Cobble content	 1.00 1.00 1.00 0.91 0.84
Bigfork-----	20	Very limited Cobble content Too steep for surface application Too steep for sprinkler application Droughty Too acid	 1.00 1.00 1.00 1.00 0.91	Very limited Seepage Too steep for surface application Depth to bedrock Too acid Cobble content	 1.00 1.00 1.00 0.91 0.15
8: Bigfork-----	65	Very limited Large stones on the surface Droughty Too steep for surface application Depth to bedrock Too acid	 1.00 1.00 1.00 0.86 0.42	Very limited Seepage Depth to bedrock Stone content Too steep for surface application Too acid	 1.00 1.00 0.77 0.50 0.42
Rock outcrop-----	25	Not rated		Not rated	
9: Bigfork-----	45	Very limited Large stones on the surface Too steep for surface application Too steep for sprinkler application Droughty Too acid	 1.00 1.00 1.00 1.00 0.91	Very limited Seepage Too steep for surface application Depth to bedrock Too acid Stone content	 1.00 1.00 1.00 0.91 0.91
Yanush-----	30	Very limited Large stones on the surface Too steep for surface application Too steep for sprinkler application Too acid Cobble content	 1.00 1.00 1.00 0.14 0.12	Very limited Seepage Too steep for surface application Too acid	 1.00 1.00 0.14

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
9: Rock outcrop-----	15	Not rated		Not rated	
10: Billstown-----	85	Very limited Slow water movement Too acid Too steep for surface application	1.00 0.91 0.68	Somewhat limited Too acid	0.91
11: Billstown-----	90	Very limited Slow water movement Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 0.91 0.78	Very limited Too steep for surface application Too acid	1.00 0.91
12: Billstown-----	50	Very limited Slow water movement Too steep for surface application Too acid Too steep for sprinkler application	1.00 1.00 0.91 0.78	Very limited Too steep for surface application Too acid	1.00 0.91
Tiak-----	40	Very limited Too steep for surface application Slow water movement Too acid Too steep for sprinkler application Depth to saturated zone	1.00 1.00 0.91 0.78 0.43	Very limited Seepage Too steep for surface application Too acid Depth to saturated zone	1.00 1.00 0.91 0.43
13: Bonnerdale-----	95	Very limited Depth to saturated zone Slow water movement Too acid Too steep for surface application	1.00 1.00 1.00 0.68	Very limited Seepage Depth to saturated zone Too acid Depth to bedrock	1.00 1.00 1.00 0.14

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
14: Carnasaw-----	70	Very limited Slow water movement Too steep for surface application Too acid Cobble content Too steep for sprinkler application	1.00 1.00 0.91 0.40 0.22	Very limited Seepage Too acid Too steep for surface application Depth to bedrock	1.00 0.91 0.50 0.01
Pirum-----	20	Very limited Large stones on the surface Too steep for surface application Too acid Slow water movement Too steep for sprinkler application	1.00 1.00 0.99 0.31 0.22	Very limited Seepage Depth to bedrock Too acid Too steep for surface application	1.00 1.00 0.99 0.50
15: Carnasaw-----	55	Very limited Too steep for surface application Slow water movement Too acid Too steep for sprinkler application Cobble content	1.00 1.00 0.91 0.78 0.59	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 0.91 0.01
Sherless-----	35	Very limited Too steep for surface application Slow water movement Too acid Cobble content Too steep for sprinkler application	1.00 1.00 1.00 0.87 0.78	Very limited Seepage Depth to bedrock Too acid Too steep for surface application	1.00 1.00 1.00

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
16: Carnasaw-----	60	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Too acid Cobble content	1.00 0.91 0.59	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 0.91 0.01
Sherless-----	35	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Too acid Cobble content	1.00 1.00 0.87	Very limited Seepage Too steep for surface application Depth to bedrock Too acid	1.00 1.00 1.00 1.00
17: Carnasaw-----	50	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Too acid Cobble content	1.00 0.91 0.87	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 0.91 0.01
Sherwood-----	25	Very limited Too steep for surface application Too steep for sprinkler application Too acid Cobble content	1.00 0.91 0.12	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 0.91 0.84
Zafra-----	15	Very limited Too steep for surface application Too steep for sprinkler application Droughty Cobble content Too acid	1.00 0.95 0.87 0.67	Very limited Seepage Too steep for surface application Depth to bedrock Too acid	1.00 1.00 1.00 0.67

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
18: Carnasaw-----	50	Very limited Large stones on the surface Too steep for surface application Too steep for sprinkler application Slow water movement Too acid	 1.00 1.00 1.00 1.00 0.91	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	 1.00 1.00 0.91 0.01
Zafra-----	25	Very limited Too steep for surface application Too steep for sprinkler application Large stones on the surface Droughty Too acid	 1.00 1.00 1.00 0.71 0.67	Very limited Seepage Too steep for surface application Depth to bedrock Too acid	 1.00 1.00 1.00 0.67
Clebit-----	15	Very limited Droughty Slow water movement Large stones on the surface Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Too acid Stone content	 1.00 1.00 1.00 0.77 0.01
19: Ceda-----	90	Very limited Filtering capacity Cobble content Flooding Too acid	 1.00 1.00 1.00 0.14	Very limited Flooding Seepage Cobble content Too acid	 1.00 1.00 1.00 0.14
20: Ceda-----	100	Very limited Filtering capacity Flooding Cobble content Too acid	 1.00 1.00 1.00 0.14	Very limited Flooding Seepage Cobble content Too acid	 1.00 1.00 1.00 0.14

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
21: Clebit-----	40	Very limited Droughty Slow water movement Large stones on the surface Depth to bedrock Too steep for surface application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too acid Too steep for surface application Stone content	 1.00 1.00 0.77 0.50 0.26
Carnasaw-----	35	Very limited Large stones on the surface Slow water movement Too steep for surface application Too acid Too steep for sprinkler application	 1.00 1.00 1.00 1.00 0.91 0.22	Very limited Seepage Too acid Too steep for surface application Depth to bedrock	 1.00 0.91 0.50 0.01
Pirum-----	15	Very limited Large stones on the surface Too steep for surface application Too acid Slow water movement Too steep for sprinkler application	 1.00 1.00 0.99 0.31 0.22	Very limited Seepage Depth to bedrock Too acid Too steep for surface application	 1.00 1.00 0.99 0.50
22: Cupco-----	90	Very limited Depth to saturated zone Too acid Slow water movement	 1.00 0.77 0.31	Very limited Seepage Depth to saturated zone Too acid Flooding	 1.00 1.00 0.77 0.40
23: Dam-----	100	Not rated		Not rated	
24: Dela-----	95	Somewhat limited Flooding Too acid	 0.60 0.07	Very limited Flooding Seepage Too acid	 1.00 1.00 0.07
25: Dela-----	90	Very limited Flooding Too acid	 1.00 0.07	Very limited Flooding Seepage Too acid	 1.00 1.00 0.07

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
26: Delight-----	100	Somewhat limited		Very limited	
		Too steep for surface application	0.68	Depth to bedrock	1.00
		Depth to bedrock	0.42	Seepage	0.69
		Slow water movement	0.31		
		Droughty	0.25		
27: Gurdon-----	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Flooding	1.00
		Too acid	0.67	Depth to saturated zone	1.00
		Flooding	0.60	Seepage	1.00
				Too acid	0.67
28: Guyton-----	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
		Too acid	0.67	Too acid	0.67
		Sodium content	0.08	Too level	0.50
				Flooding	0.40
29: Guyton-----	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Flooding	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Too acid	0.67	Seepage	1.00
		Flooding	0.60	Too acid	0.67
		Sodium content	0.08	Too level	0.50
30: Guyton-----	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
		Ponding	1.00	Ponding	1.00
		Too acid	0.67	Too acid	0.67
		Sodium content	0.08	Too level	0.50
31: Japany-----	90	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Too acid	0.03
		Too acid	0.03		
32: Kenn-----	95	Somewhat limited		Very limited	
		Too acid	0.42	Seepage	1.00
				Too acid	0.42
				Flooding	0.40

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
33: Kenn-----	90	Somewhat limited Flooding Too acid	0.60 0.42	Very limited Flooding Seepage Too acid	1.00 1.00 0.42
34: Kenn-----	90	Very limited Flooding Too acid	1.00 0.42	Very limited Flooding Seepage Too acid	1.00 1.00 0.42
35: Kenn-----	55	Very limited Flooding Too acid Cobble content	1.00 0.42 0.18	Very limited Flooding Seepage Too acid	1.00 1.00 0.42
Ceda-----	35	Very limited Filtering capacity Cobble content Flooding Too acid	1.00 1.00 1.00 0.14	Very limited Flooding Seepage Cobble content Too acid	1.00 1.00 1.00 0.14
36: Kizzia-----	90	Somewhat limited Depth to saturated zone Too steep for surface application Too acid	0.99 0.32 0.21	Very limited Seepage Depth to saturated zone Too acid	1.00 0.99 0.21
37: Leeper-----	95	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Flooding Depth to saturated zone	1.00 1.00
38: Littlefir-----	60	Very limited Slow water movement Too acid Too steep for surface application	1.00 0.91 0.32	Very limited Seepage Depth to bedrock Too acid	1.00 0.94 0.91
Carnasaw-----	30	Very limited Slow water movement Too acid Too steep for surface application	1.00 0.91 0.32	Very limited Seepage Too acid Depth to bedrock	1.00 0.91 0.01

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
39: Magnet-----	100	Very limited Large stones on the surface Too steep for surface application Too steep for sprinkler application Too acid Slow water movement	1.00 1.00 1.00 0.77 0.37	Very limited Seepage Too steep for surface application Depth to bedrock Too acid Stone content	1.00 1.00 1.00 0.77 0.15
40: Marietta-----	95	Very limited Depth to saturated zone Flooding	1.00 0.60	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 1.00
41: Mazarn-----	100	Very limited Depth to saturated zone Too acid Slow water movement Depth to bedrock	1.00 0.99 0.31 0.06	Very limited Seepage Depth to saturated zone Depth to bedrock Too acid	1.00 1.00 1.00 0.99
42: Mazarn-----	90	Very limited Depth to saturated zone Too acid Flooding Slow water movement Depth to bedrock	1.00 0.99 0.60 0.31 0.06	Very limited Flooding Seepage Depth to saturated zone Depth to bedrock Too acid	1.00 1.00 1.00 1.00 0.99
43: McCaskill-----	95	Very limited Depth to saturated zone Too acid Slow water movement	1.00 0.96 0.31	Very limited Seepage Depth to saturated zone Too acid Flooding	1.00 1.00 0.96 0.20
44: Mena-----	95	Very limited Slow water movement Too acid Depth to saturated zone Too steep for surface application	1.00 0.91 0.86 0.08	Very limited Seepage Too acid Depth to saturated zone	1.00 0.91 0.86

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
45: Mena-----	95	Very limited Slow water movement Too steep for surface application Too acid Depth to saturated zone Too steep for sprinkler application	1.00 1.00 0.91 0.86 0.22	Very limited Seepage Too acid Depth to saturated zone Too steep for surface application	1.00 0.91 0.86 0.50
46: Mena-----	95	Very limited Slow water movement Too acid Depth to saturated zone Too steep for surface application	1.00 0.91 0.86 0.08	Very limited Seepage Too acid Depth to saturated zone	1.00 0.91 0.86
47, 48: Murfreesboro-----	90	Somewhat limited Too acid Too steep for surface application	0.42 0.08	Very limited Seepage Too acid	1.00 0.42
49: Nathan-----	90	Somewhat limited Depth to saturated zone Too acid Too steep for surface application	0.99 0.77 0.32	Very limited Seepage Depth to saturated zone Too acid	1.00 0.99 0.77
50: Nashoba-----	50	Very limited Droughty Too acid Depth to bedrock Too steep for surface application	1.00 0.67 0.65 0.32	Very limited Seepage Depth to bedrock Too acid	1.00 1.00 0.67
Bismarck-----	25	Very limited Droughty Depth to bedrock Too acid Too steep for surface application	1.00 1.00 0.91 0.32	Very limited Seepage Depth to bedrock Too acid Cobble content	1.00 1.00 0.91 0.06

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
50: Littlefir-----	20	Very limited		Very limited	
		Slow water	1.00	Seepage	1.00
		movement		Too acid	0.99
		Too acid	0.99	Depth to bedrock	0.94
		Too steep for	0.32		
		surface			
		application			
51: Nashoba-----	50	Very limited		Very limited	
		Too steep for	1.00	Seepage	1.00
		surface		Depth to bedrock	1.00
		application		Too steep for	1.00
		Droughty	1.00	surface	
		Too steep for	0.78	application	
		sprinkler		Too acid	0.67
		application			
		Cobble content	0.68		
		Too acid	0.67		
Bismarck-----	25	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for	1.00	Depth to bedrock	1.00
		surface		Too steep for	1.00
		application		surface	
		Depth to bedrock	1.00	application	
		Cobble content	1.00	Too acid	0.91
		Too acid	0.91	Cobble content	0.84
Littlefir-----	20	Very limited		Very limited	
		Too steep for	1.00	Too steep for	1.00
		surface		surface	
		application		application	
		Slow water	1.00	Seepage	1.00
		movement		Too acid	0.99
		Too acid	0.99	Depth to bedrock	0.94
		Too steep for	0.78		
		sprinkler			
		application			
		Cobble content	0.18		
52: Nashoba-----	50	Very limited		Very limited	
		Too steep for	1.00	Seepage	1.00
		surface		Too steep for	1.00
		application		surface	
		Too steep for	1.00	application	
		sprinkler		Depth to bedrock	1.00
		application		Too acid	0.67
		Large stones on	1.00		
		the surface			
		Droughty	1.00		
		Too acid	0.67		

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
52: Littlefir-----	25	Very limited Too steep for surface application Too steep for sprinkler application Large stones on the surface Slow water movement Too acid	1.00 0.91	Very limited Seepage Too steep for surface application Depth to bedrock Too acid	1.00 1.00 0.94 0.91
Sherless-----	15	Very limited Too steep for surface application Too steep for sprinkler application Large stones on the surface Slow water movement Too acid	1.00 0.91	Very limited Seepage Too steep for surface application Depth to bedrock Too acid	1.00 1.00 1.00 0.91
53: Neff-----	95	Very limited Depth to saturated zone Too acid Flooding Slow water movement	1.00 0.91 0.60 0.31	Very limited Flooding Seepage Depth to saturated zone Too acid	1.00 1.00 1.00 0.91
54: Ochlockonee-----	95	Somewhat limited Too acid	0.77	Very limited Seepage Too acid Flooding	1.00 0.77 0.40
55: Ochlockonee-----	95	Somewhat limited Too acid Flooding	0.77 0.60	Very limited Flooding Seepage Too acid	1.00 1.00 0.77
56: Ochlockonee-----	95	Very limited Flooding Too acid	1.00 0.77	Very limited Flooding Seepage Too acid	1.00 1.00 0.77
57: Ouachita-----	95	Somewhat limited Too acid Slow water movement	0.91 0.31	Very limited Seepage Too acid Flooding	1.00 0.91 0.40

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
58: Ouachita-----	95	Somewhat limited		Very limited	
		Too acid	0.91	Flooding	1.00
		Flooding	0.60	Seepage	1.00
		Slow water movement	0.31	Too acid	0.91
59: Ozan-----	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.91	Seepage	1.00
		Low adsorption	0.02	Too acid	0.91
				Flooding	0.40
				Low adsorption	0.02
60: Ozan-----	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Flooding	1.00
		Too acid	0.91	Depth to saturated zone	1.00
		Flooding	0.60	Seepage	1.00
		Low adsorption	0.02	Too acid	0.91
				Low adsorption	0.02
61: Peanutrock-----	95	Somewhat limited		Very limited	
		Too acid	0.99	Seepage	1.00
		Too steep for surface application	0.68	Too acid	0.99
				Cobble content	0.01
62: Peanutrock-----	95	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	0.99	Too steep for surface application	1.00
		Too steep for sprinkler application	0.78	Too acid	0.99
				Cobble content	0.01
63: Peanutrock-----	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	0.99	Too acid	0.99
				Cobble content	0.01
64: Peanutrock-----	55	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	0.99	Too steep for surface application	1.00
		Too steep for sprinkler application	0.78	Too acid	0.99
				Cobble content	0.01

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
64: Tiak-----	35	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Slow water movement	1.00	Too steep for surface application	1.00
		Too acid	0.91	Too acid	0.91
		Too steep for sprinkler application	0.78		
65: Pikecity-----	90	Somewhat limited		Very limited	
		Too acid	0.99	Seepage	1.00
		Low adsorption	0.98	Too acid	0.99
		Too steep for surface application	0.32	Low adsorption	0.98
66: Pikecreek-----	100	Very limited		Very limited	
		Filtering capacity	1.00	Flooding	1.00
		Flooding	1.00	Seepage	1.00
		Too acid	0.14	Cobble content	0.38
		Cobble content	0.01	Too acid	0.14
67: Pirum-----	50	Somewhat limited		Very limited	
		Too acid	0.99	Seepage	1.00
		Slow water movement	0.31	Depth to bedrock	1.00
		Too steep for surface application	0.08	Too acid	0.99
		Droughty	0.04		
		Depth to bedrock	0.01		
Sherless-----	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Too acid	1.00	Depth to bedrock	1.00
		Too steep for surface application	0.68	Too acid	1.00
		Droughty	0.02		
Bonnerdale-----	20	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Too acid	1.00	Too acid	1.00
		Too steep for surface application	0.08	Depth to bedrock	0.14

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
68:					
Pits-----	60	Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated	
69:					
Riverwash-----	60	Not rated		Not rated	
Ceda-----	35	Very limited		Very limited	
		Filtering capacity	1.00	Flooding	1.00
		Cobble content	1.00	Seepage	1.00
		Flooding	1.00	Cobble content	1.00
		Too acid	0.14	Too acid	0.14
70:					
Sardis-----	90	Somewhat limited		Very limited	
		Depth to saturated zone	0.95	Seepage	1.00
		Too acid	0.91	Depth to saturated zone	0.95
				Too acid	0.91
				Flooding	0.40
71:					
Sardis-----	90	Somewhat limited		Very limited	
		Depth to saturated zone	0.95	Flooding	1.00
		Too acid	0.91	Seepage	1.00
		Flooding	0.60	Depth to saturated zone	0.95
				Too acid	0.91
72:					
Sherless-----	50	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Too acid	1.00	Depth to bedrock	1.00
		Too steep for surface application	0.32	Too acid	1.00
		Droughty	0.02		
		Depth to bedrock	0.01		
Littlefir-----	40	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Too acid	0.91	Depth to bedrock	0.94
		Too steep for surface application	0.32	Too acid	0.91

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
73: Sherless-----	50	Very limited Too steep for surface application Slow water movement Too acid Cobble content Too steep for sprinkler application	1.00 1.00 1.00 0.87 0.78	Very limited Seepage Depth to bedrock Too acid Too steep for surface application	1.00 1.00 1.00 1.00
Littlefir-----	25	Very limited Too steep for surface application Slow water movement Too acid Too steep for sprinkler application Cobble content	1.00 1.00 0.91 0.78 0.68	Very limited Seepage Too steep for surface application Depth to bedrock Too acid	1.00 1.00 0.94 0.91
Nashoba-----	15	Very limited Too steep for surface application Droughty Too steep for sprinkler application Cobble content Too acid	1.00 1.00 0.78 0.68 0.67	Very limited Seepage Depth to bedrock Too steep for surface application Too acid	1.00 1.00 1.00 0.67
74: Sherless-----	45	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Too acid Cobble content	1.00 1.00 1.00 1.00 0.87	Very limited Seepage Too steep for surface application Depth to bedrock Too acid	1.00 1.00 1.00 1.00
Littlefir-----	30	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Too acid Cobble content	1.00 1.00 1.00 0.91 0.68	Very limited Seepage Too steep for surface application Depth to bedrock Too acid	1.00 1.00 0.94 0.91

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
74: Nashoba-----	15	Very limited Too steep for surface application Too steep for sprinkler application Large stones on the surface Droughty Too acid	1.00 1.00 1.00 0.67	Very limited Seepage Too steep for surface application Depth to bedrock Too acid	1.00 1.00 1.00 0.67
75: Sherless-----	60	Very limited Slow water movement Too acid Cobble content Too steep for surface application Droughty	1.00 1.00 0.87 0.32 0.02	Very limited Seepage Depth to bedrock Too acid	1.00 1.00 1.00
Nashoba-----	30	Very limited Droughty Cobble content Too acid Depth to bedrock Too steep for surface application	1.00 0.68 0.67 0.65 0.32	Very limited Seepage Depth to bedrock Too acid	1.00 1.00 0.67
76: Smithton-----	100	Very limited Depth to saturated zone Too acid Slow water movement	1.00 0.99 0.31	Very limited Seepage Depth to saturated zone Too acid	1.00 1.00 0.99
77: Speer-----	95	Somewhat limited Flooding Too acid	0.60 0.07	Very limited Flooding Seepage Too acid	1.00 1.00 0.07
78: Speer-----	95	Somewhat limited Too acid	0.07	Very limited Seepage Flooding Too acid	1.00 0.40 0.07
79: Stelltown-----	90	Somewhat limited Too acid Depth to saturated zone Too steep for surface application	0.99 0.86 0.08	Very limited Seepage Too acid Depth to saturated zone	1.00 0.99 0.86

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
80: Stelltown-----	90	Very limited Too steep for surface application Too acid Depth to saturated zone Too steep for sprinkler application	1.00 0.99 0.86 0.22	Very limited Seepage Too acid Depth to saturated zone Too steep for surface application	1.00 0.99 0.86 0.50
81, 82: Tiak-----	100	Very limited Slow water movement Too acid Depth to saturated zone Too steep for surface application	1.00 0.91 0.43 0.32	Very limited Seepage Too acid Depth to saturated zone	1.00 0.91 0.43
83: Tiak-----	100	Very limited Too steep for surface application Slow water movement Too acid Too steep for sprinkler application Depth to saturated zone	1.00 1.00 0.91 0.78 0.43	Very limited Seepage Too steep for surface application Too acid Depth to saturated zone	1.00 1.00 0.91 0.43
84: Tiak-----	60	Very limited Slow water movement Too acid Depth to saturated zone Too steep for surface application	1.00 0.91 0.43 0.32	Very limited Seepage Too acid Depth to saturated zone	1.00 0.91 0.43
Antoine-----	40	Very limited Slow water movement Too acid Too steep for surface application	1.00 0.99 0.08	Very limited Seepage Too acid	1.00 0.99

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
85: Tiak-----	50	Very limited Too steep for surface application Slow water movement Too acid Too steep for sprinkler application Depth to saturated zone	1.00 1.00 0.91 0.78 0.43	Very limited Seepage Too steep for surface application Too acid Depth to saturated zone	1.00 1.00 0.91 0.43
Antoine-----	40	Very limited Too steep for surface application Slow water movement Too acid Too steep for sprinkler application	1.00 1.00 0.99 0.40	Very limited Seepage Too acid Too steep for surface application	1.00 0.99 0.78
86: Toine-----	95	Somewhat limited Too acid	0.42	Very limited Seepage Too acid Flooding	1.00 0.42 0.40
87: Toine-----	95	Somewhat limited Flooding Too acid	0.60 0.42	Very limited Flooding Seepage Too acid	1.00 1.00 0.42
88: Una-----	100	Very limited Slow water movement Depth to saturated zone Too acid Flooding	1.00 1.00 0.99 0.60	Very limited Flooding Depth to saturated zone Too acid	1.00 1.00 0.99
89: Vaughn-----	90	Somewhat limited Flooding Too acid	0.60 0.55	Very limited Flooding Seepage Too acid	1.00 1.00 0.55
90: Vaughn-----	55	Very limited Flooding Too acid	1.00 0.55	Very limited Flooding Seepage Too acid	1.00 1.00 0.55

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
90: Pikecreek-----	35	Very limited Filtering capacity Flooding Too acid Cobble content	1.00 1.00 0.14 0.01	Very limited Flooding Seepage Cobble content Too acid	1.00 1.00 0.38 0.14
91: Water-----	100	Not rated		Not rated	
92: Wetsaw-----	100	Very limited Slow water movement Depth to saturated zone Too acid Too steep for surface application	1.00 0.99 0.42 0.08	Very limited Seepage Depth to saturated zone Too acid	1.00 0.99 0.42
93: Woodall-----	100	Very limited Depth to saturated zone Too acid Flooding Slow water movement	1.00 0.99 0.60 0.37	Very limited Flooding Depth to saturated zone Seepage Too acid	1.00 1.00 1.00 0.99
94: Woodall-----	95	Very limited Depth to saturated zone Too acid Flooding Slow water movement	1.00 0.99 0.60 0.37	Very limited Flooding Depth to saturated zone Seepage Too acid	1.00 1.00 1.00 0.99
95: Yanush-----	90	Somewhat limited Too steep for surface application Too acid	0.32 0.14	Very limited Seepage Too acid	1.00 0.14
96: Yanush-----	90	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 0.78 0.14	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 0.14

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
97:					
Yanush-----	50	Very limited		Very limited	
		Cobble content	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Too acid	0.14
		Too acid	0.14		
Avant-----	35	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Depth to bedrock	1.00
		Droughty	0.98	Too acid	0.91
		Too acid	0.91	Cobble content	0.07
Bengal-----	15	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Depth to bedrock	1.00
		Cobble content	1.00	Too acid	0.91
		Too acid	0.91		
98:					
Yanush-----	50	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Cobble content	0.24	Too acid	0.14
		Too acid	0.14		
Avant-----	35	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Depth to bedrock	1.00
		Droughty	0.98	Too acid	0.91
		Too acid	0.91	Cobble content	0.07

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
98: Bengal-----	15	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Depth to bedrock	1.00
		Slow water movement	1.00	Too acid	0.91
		Too acid	0.91		
99: Yanush-----	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	0.14	Too acid	0.14
Bigfork-----	35	Very limited		Very limited	
		Cobble content	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Depth to bedrock	1.00
		Droughty	1.00	Too acid	0.91
		Too acid	0.91	Stone content	0.20
100: Yanush-----	55	Very limited		Very limited	
		Large stones on the surface	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Too acid	0.14
		Too acid	0.14		
		Cobble content	0.12		
Bigfork-----	30	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Large stones on the surface	1.00	Depth to bedrock	1.00
		Droughty	1.00	Too acid	0.91
		Too acid	0.91	Stone content	0.32

Soil Survey of Pike County, Arkansas

Table 15b.--Agricultural Waste Management (Part 2)--Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
101: Zafra-----	40	Very limited Large stones on the surface Too steep for surface application Too steep for sprinkler application Droughty Too acid	 1.00 1.00 1.00 0.71 0.67	Very limited Seepage Too steep for surface application Depth to bedrock Too acid	 1.00 1.00 1.00 0.67
Carnasaw-----	30	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Large stones on the surface Too acid	 1.00 1.00 1.00 1.00 1.00 0.91	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	 1.00 1.00 0.91 0.01
Clebit-----	20	Very limited Droughty Slow water movement Large stones on the surface Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Too acid Stone content	 1.00 1.00 1.00 0.77 0.26

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1: Antoine-----	90	Very limited Slow water movement Depth to saturated zone Too acid	1.00 0.99 0.03	Somewhat limited Too acid Depth to saturated zone Slow water movement	 0.99 0.99 0.96
2, 3: Avilla-----	90	Very limited Slow water movement	1.00	Somewhat limited Too acid Too steep for surface application	0.42 0.08
4: Avilla-----	100	Very limited Slow water movement Slope	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 0.50 0.42
5: Bengal-----	50	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Depth to bedrock Too steep for sprinkler irrigation Slow water movement Too acid	1.00 1.00 1.00 0.96 0.91
Bismarck-----	20	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Too steep for surface application Cobble content Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00 0.91

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5: Yanush-----	20	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Cobble content Too acid	1.00 1.00 1.00 0.24 0.14
6: Bengal-----	50	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Slow water movement Too acid	1.00 1.00 1.00 1.00 0.96 0.91
Bismarck-----	20	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Too steep for surface application Too steep for sprinkler irrigation Cobble content Too acid	1.00 1.00 1.00 1.00 1.00 0.91
Yanush-----	20	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Cobble content Too acid	1.00 1.00 1.00 0.24 0.14
7: Bengal-----	55	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Cobble content Slow water movement	1.00 1.00 1.00 1.00 1.00 0.96

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
7: Bismarck-----	25	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Too steep for surface application Too steep for sprinkler irrigation Cobble content Too acid	1.00 1.00 1.00 1.00 1.00 0.91
Bigfork-----	20	Very limited Slope Depth to bedrock Slow water movement Cobble content Stone content	1.00 1.00 1.00 0.97 0.74	Very limited Cobble content Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid	1.00 1.00 1.00 1.00 1.00 0.91
8: Bigfork-----	65	Very limited Depth to bedrock Slow water movement Stone content Slope Cobble content	1.00 1.00 1.00 1.00 0.63	Very limited Large stones on the surface Depth to bedrock Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 0.50 0.42
Rock outcrop-----	25	Not rated		Not rated	
9: Bigfork-----	45	Very limited Slope Depth to bedrock Slow water movement Stone content Cobble content	1.00 1.00 1.00 1.00 0.51	Very limited Large stones on the surface Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid	1.00 1.00 1.00 1.00 0.91

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
9: Yanush-----	30	Very limited Slope Slow water movement	1.00 1.00	Very limited Large stones on the surface Too steep for surface application Too steep for sprinkler irrigation Too acid Cobble content	1.00 1.00 1.00 1.00 0.14 0.12
Rock outcrop-----	15	Not rated		Not rated	
10: Billstown-----	85	Very limited Slow water movement Slope Too acid	1.00 0.50 0.01	Very limited Slow water movement Too acid Too steep for surface application	1.00 0.91 0.68
11: Billstown-----	90	Very limited Slope Slow water movement Too acid	1.00 1.00 0.01	Very limited Too steep for surface application Slow water movement Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00 0.91
12: Billstown-----	50	Very limited Slope Slow water movement Too acid	1.00 1.00 0.01	Very limited Too steep for surface application Slow water movement Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00 0.91
Tiak-----	40	Very limited Slope Slow water movement Depth to saturated zone Too acid	1.00 1.00 1.00 0.07	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid Depth to saturated zone	1.00 1.00 1.00 0.96 0.91 0.43

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
13: Bonnerdale-----	95	Very limited Slow water movement Depth to saturated zone Depth to bedrock Slope Too acid	1.00 1.00 1.00 0.50 0.14	Very limited Depth to saturated zone Too acid Slow water movement Too steep for surface application Depth to bedrock	1.00 1.00 0.96 0.68 0.14
14: Carnasaw-----	70	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 1.00	Very limited Too steep for surface application Slow water movement Too acid Too steep for sprinkler irrigation Cobble content	1.00 0.96 0.91 0.50 0.40
Pirum-----	20	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 1.00	Very limited Large stones on the surface Depth to bedrock Too steep for surface application Too acid Too steep for sprinkler irrigation	1.00 1.00 1.00 0.99 0.50
15: Carnasaw-----	55	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid Cobble content	1.00 1.00 0.96 0.91 0.59
Sherless-----	35	Very limited Slope Slow water movement Depth to bedrock Too acid	1.00 1.00 1.00 0.14	Very limited Too steep for surface application Depth to bedrock Too acid Too steep for sprinkler irrigation Slow water movement	1.00 1.00 1.00 1.00 0.96

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
16: Carnasaw-----	60	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid Cobble content	1.00 1.00 1.00 0.96 0.91 0.59
Sherless-----	35	Very limited Slope Slow water movement Depth to bedrock Too acid	1.00 1.00 1.00 0.14	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid Slow water movement	1.00 1.00 1.00 1.00 1.00 0.96
17: Carnasaw-----	50	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid Cobble content	1.00 1.00 1.00 0.96 0.91 0.87
Sherwood-----	25	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Depth to bedrock Cobble content	1.00 1.00 1.00 0.91 0.84 0.12
Zafra-----	15	Very limited Slope Depth to bedrock Slow water movement Too acid	1.00 1.00 1.00 0.03	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Cobble content Too acid	1.00 1.00 1.00 1.00 0.87 0.67

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
18: Carnasaw-----	50	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Large stones on the surface Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid	1.00 1.00 1.00 1.00 0.96 0.91
Zafra-----	25	Very limited Slope Depth to bedrock Slow water movement Too acid	1.00 1.00 1.00 0.03	Very limited Too steep for surface application Too steep for sprinkler irrigation Large stones on the surface Depth to bedrock Too acid	1.00 1.00 1.00 1.00 1.00 0.67
Clebit-----	15	Very limited Slope Slow water movement Depth to bedrock Stone content	1.00 1.00 1.00 0.01	Very limited Slow water movement Depth to bedrock Large stones on the surface Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00 1.00 1.00
19: Ceda-----	90	Very limited Flooding Cobble content	1.00 1.00	Very limited Filtering capacity Cobble content Flooding Too acid	1.00 1.00 1.00 0.14
20: Ceda-----	100	Very limited Flooding Cobble content	1.00 1.00	Very limited Filtering capacity Flooding Cobble content Too acid	1.00 1.00 1.00 0.14

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
21: Clebit-----	40	Very limited Slow water movement Depth to bedrock Slope Stone content Cobble content	1.00 1.00 1.00 0.26 0.05	Very limited Slow water movement Depth to bedrock Large stones on the surface Too steep for surface application Cobble content	1.00 1.00 1.00 1.00 0.95
Carnasaw-----	35	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 1.00	Very limited Large stones on the surface Too steep for surface application Slow water movement Too acid Too steep for sprinkler irrigation	1.00 1.00 0.96 0.91 0.50
Pirum-----	15	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 1.00	Very limited Large stones on the surface Depth to bedrock Too steep for surface application Too acid Too steep for sprinkler irrigation	1.00 1.00 1.00 0.99 0.50
22: Cupco-----	90	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too acid Slow water movement	1.00 0.77 0.21
23: Dam-----	100	Not rated		Not rated	
24: Dela-----	95	Very limited Depth to saturated zone Flooding Slow water movement	1.00 0.60 0.31	Somewhat limited Flooding Too acid	0.60 0.07

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
25: Dela-----	90	Very limited Flooding Depth to saturated zone Slow water movement	1.00 1.00 0.31	Very limited Flooding Too acid	1.00 0.07
26: Delight-----	100	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 0.50	Very limited Depth to bedrock Too steep for surface application Slow water movement	1.00 0.68 0.21
27: Gurdon-----	90	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Too acid Flooding	1.00 0.67 0.60
28: Guyton-----	100	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Slow water movement Too acid Sodium content	1.00 0.94 0.67 0.08
29: Guyton-----	100	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Slow water movement Too acid Flooding Sodium content	1.00 0.94 0.67 0.60 0.08
30: Guyton-----	100	Very limited Slow water movement Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Slow water movement Too acid Sodium content	1.00 1.00 0.94 0.67 0.08
31: Japany-----	90	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Slow water movement Too acid	1.00 1.00 0.03

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
32: Kenn-----	95	Very limited Slow water movement	1.00	Somewhat limited Too acid	0.42
33: Kenn-----	90	Very limited Slow water movement Flooding	1.00 0.60	Somewhat limited Flooding Too acid	0.60 0.42
34: Kenn-----	90	Very limited Flooding Slow water movement	1.00 1.00	Very limited Flooding Too acid	1.00 0.42
35: Kenn-----	55	Very limited Flooding Slow water movement	1.00 1.00	Very limited Flooding Too acid Cobble content	1.00 0.42 0.18
Ceda-----	35	Very limited Flooding Cobble content	1.00 1.00	Very limited Filtering capacity Cobble content Flooding Too acid	1.00 1.00 1.00 0.14
36: Kizzia-----	90	Very limited Slow water movement Depth to saturated zone Slope	1.00 0.99 0.12	Somewhat limited Depth to saturated zone Too steep for surface application Too acid	0.99 0.32 0.21
37: Leeper-----	95	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60
38: Littlefir-----	60	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 0.12	Somewhat limited Slow water movement Depth to bedrock Too acid Too steep for surface application	0.96 0.94 0.91 0.32

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
38: Carnasaw-----	30	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 0.12	Somewhat limited Slow water movement Too acid Too steep for surface application Depth to bedrock	0.96 0.91 0.32 0.01
39: Magnet-----	100	Very limited Slope Slow water movement Depth to bedrock Stone content	1.00 1.00 1.00 0.47	Very limited Large stones on the surface Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid	1.00 1.00 1.00 1.00 0.77
40: Marietta-----	95	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Flooding	1.00 0.60
41: Mazarn-----	100	Very limited Slow water movement Depth to saturated zone Depth to bedrock	1.00 1.00 1.00	Very limited Depth to saturated zone Depth to bedrock Too acid Slow water movement	1.00 1.00 0.99 0.21
42: Mazarn-----	90	Very limited Slow water movement Depth to saturated zone Depth to bedrock Flooding	1.00 1.00 1.00 0.60	Very limited Depth to saturated zone Depth to bedrock Too acid Flooding Slow water movement	1.00 1.00 0.99 0.60 0.21
43: McCaskill-----	95	Very limited Slow water movement Depth to saturated zone Too acid	1.00 1.00 0.21	Very limited Depth to saturated zone Too acid Slow water movement	1.00 0.96 0.21

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
44: Mena-----	95	Very limited Slow water movement Depth to saturated zone Too acid	1.00 0.86 0.14	Very limited Slow water movement Too acid Depth to saturated zone Too steep for surface application	1.00 0.91 0.86 0.08
45: Mena-----	95	Very limited Slow water movement Slope Depth to saturated zone Too acid	1.00 1.00 0.86 0.14	Very limited Slow water movement Too steep for surface application Too acid Depth to saturated zone Too steep for sprinkler irrigation	1.00 1.00 0.91 0.86 0.50
46: Mena-----	95	Very limited Slow water movement Depth to saturated zone Too acid	1.00 0.86 0.14	Very limited Slow water movement Too acid Depth to saturated zone Too steep for surface application	1.00 0.91 0.86 0.08
47, 48: Murfreesboro-----	90	Very limited Slow water movement	1.00	Somewhat limited Too acid Too steep for surface application	0.42 0.08
49: Nathan-----	90	Very limited Slow water movement Depth to saturated zone Too acid Slope	1.00 0.99 0.14 0.12	Somewhat limited Depth to saturated zone Too acid Too steep for surface application	0.99 0.77 0.32
50: Nashoba-----	50	Very limited Depth to bedrock Slow water movement Slope	1.00 0.31 0.12	Very limited Depth to bedrock Too acid Too steep for surface application	1.00 0.67 0.32

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
50: Bismarck-----	25	Very limited Depth to bedrock Slow water movement Cobble content Slope	1.00 1.00 0.31 0.12	Very limited Depth to bedrock Too acid Too steep for surface application	1.00 0.91 0.32
Littlefir-----	20	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 0.12	Somewhat limited Too acid Slow water movement Depth to bedrock Too steep for surface application	0.99 0.96 0.94 0.32
51: Nashoba-----	50	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Depth to bedrock Too steep for sprinkler irrigation Cobble content Too acid	1.00 1.00 1.00 0.68 0.67
Bismarck-----	25	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 1.00	Very limited Depth to bedrock Too steep for surface application Cobble content Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00 0.91
Littlefir-----	20	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid Slow water movement Depth to bedrock	1.00 1.00 1.00 0.99 0.96 0.94

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
52: Nashoba-----	50	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 0.31	Very limited Too steep for surface application Too steep for sprinkler irrigation Large stones on the surface Depth to bedrock Too acid	1.00 1.00 1.00 1.00 1.00 0.67
Littlefir-----	25	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Large stones on the surface Slow water movement Depth to bedrock	1.00 1.00 1.00 1.00 1.00 0.96 0.94
Sherless-----	15	Very limited Slope Slow water movement Depth to bedrock Too acid	1.00 1.00 1.00 0.14	Very limited Too steep for surface application Too steep for sprinkler irrigation Large stones on the surface Depth to bedrock Slow water movement	1.00 1.00 1.00 1.00 1.00 0.96
53: Neff-----	95	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Too acid Flooding Slow water movement	1.00 0.91 0.60 0.21
54: Ochlockonee-----	95	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Somewhat limited Too acid	0.77

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Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
55: Ochlockonee-----	95	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Somewhat limited Too acid Flooding	0.77 0.60
56: Ochlockonee-----	95	Very limited Flooding Slow water movement	1.00 1.00	Very limited Flooding Too acid	1.00 0.77
57: Ouachita-----	95	Very limited Slow water movement	1.00	Somewhat limited Too acid Slow water movement	0.91 0.21
58: Ouachita-----	95	Very limited Slow water movement Flooding	1.00 0.60	Somewhat limited Too acid Flooding Slow water movement	0.91 0.60 0.21
59: Ozan-----	100	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Too acid Low adsorption	1.00 0.91 0.02
60: Ozan-----	100	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Too acid Flooding Low adsorption	1.00 0.91 0.60 0.02
61: Peanutrock-----	95	Very limited Slow water movement Slope Cobble content	1.00 0.50 0.07	Somewhat limited Too acid Too steep for surface application	0.99 0.68
62: Peanutrock-----	95	Very limited Slope Slow water movement Cobble content	1.00 1.00 0.07	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 0.99

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
63: Peanutrock-----	90	Very limited Slope Slow water movement Cobble content	1.00 1.00 0.07	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 0.99
64: Peanutrock-----	55	Very limited Slope Slow water movement Cobble content	1.00 1.00 0.07	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 0.99
Tiak-----	35	Very limited Slope Slow water movement Too acid	1.00 1.00 0.07	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid	1.00 1.00 1.00 0.96 0.91
65: Pikecity-----	90	Very limited Slow water movement Slope	1.00 0.12	Somewhat limited Too acid Low adsorption Too steep for surface application	0.99 0.98 0.32
66: Pikecreek-----	100	Very limited Flooding Cobble content	1.00 0.71	Very limited Filtering capacity Flooding Too acid Cobble content	1.00 1.00 0.14 0.01
67: Pirum-----	50	Very limited Slow water movement Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Too acid Slow water movement Too steep for surface application	1.00 0.99 0.21 0.08

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
67: Sherless-----	30	Very limited Slow water movement Depth to saturated zone Depth to bedrock Slope Too acid	1.00 1.00 1.00 0.50 0.14	Very limited Depth to saturated zone Depth to bedrock Too acid Slow water movement Too steep for surface application	1.00 1.00 1.00 0.96 0.68
Bonnerdale-----	20	Very limited Slow water movement Depth to saturated zone Depth to bedrock Too acid	1.00 1.00 1.00 0.14	Very limited Depth to saturated zone Too acid Slow water movement Depth to bedrock Too steep for surface application	1.00 1.00 0.96 0.14 0.08
68: Pits-----	60	Not rated		Not rated	
Udorthents-----	40	Not rated		Not rated	
69: Riverwash-----	60	Not rated		Not rated	
Ceda-----	35	Very limited Flooding Cobble content	1.00 1.00	Very limited Filtering capacity Cobble content Flooding Too acid	1.00 1.00 1.00 0.14
70: Sardis-----	90	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Somewhat limited Depth to saturated zone Too acid	0.95 0.91
71: Sardis-----	90	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 0.60	Somewhat limited Depth to saturated zone Too acid Flooding	0.95 0.91 0.60

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
72: Sherless-----	50	Very limited Slow water movement Depth to bedrock Too acid Slope	1.00 1.00 0.14 0.12	Very limited Depth to bedrock Too acid Slow water movement Too steep for surface application	1.00 1.00 0.96 0.32
Littlefir-----	40	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 0.12	Somewhat limited Slow water movement Depth to bedrock Too acid Too steep for surface application	0.96 0.94 0.91 0.32
73: Sherless-----	50	Very limited Slope Slow water movement Depth to bedrock Too acid	1.00 1.00 1.00 0.14	Very limited Too steep for surface application Depth to bedrock Too acid Too steep for sprinkler irrigation Slow water movement	1.00 1.00 1.00 1.00 0.96
Littlefir-----	25	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement Depth to bedrock Too acid	1.00 1.00 0.96 0.94 0.91
Nashoba-----	15	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Depth to bedrock Too steep for sprinkler irrigation Cobble content Too acid	1.00 1.00 1.00 0.68 0.67

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
74: Sherless-----	45	Very limited Slope Slow water movement Depth to bedrock Too acid	1.00 1.00 1.00 0.14	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid Slow water movement	1.00 1.00 1.00 1.00 1.00 0.96
Littlefir-----	30	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement Depth to bedrock Too acid	1.00 1.00 1.00 0.96 0.94 0.91
Nashoba-----	15	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Large stones on the surface Depth to bedrock Too acid	1.00 1.00 1.00 1.00 1.00 0.67
75: Sherless-----	60	Very limited Slow water movement Depth to bedrock Too acid Slope	1.00 1.00 1.00 0.14 0.12	Very limited Depth to bedrock Too acid Slow water movement Cobble content Too steep for surface application	1.00 1.00 0.96 0.87 0.32
Nashoba-----	30	Very limited Depth to bedrock Slow water movement Slope	1.00 1.00 0.12	Very limited Depth to bedrock Cobble content Too acid Too steep for surface application	1.00 0.68 0.67 0.32

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
76: Smithton-----	100	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too acid Slow water movement	1.00 0.99 0.21
77: Speer-----	95	Very limited Slow water movement Flooding	1.00 0.60	Somewhat limited Flooding Too acid	0.60 0.07
78: Speer-----	95	Very limited Slow water movement	1.00	Somewhat limited Too acid	0.07
79: Stelltown-----	90	Very limited Depth to saturated zone Slow water movement Too acid	1.00 1.00 0.21	Somewhat limited Too acid Depth to saturated zone Too steep for surface application	0.99 0.86 0.08
80: Stelltown-----	90	Very limited Depth to saturated zone Slow water movement Slope Too acid	1.00 1.00 1.00 0.21	Very limited Too steep for surface application Too acid Depth to saturated zone Too steep for sprinkler irrigation	1.00 0.99 0.86 0.50
81, 82: Tiak-----	100	Very limited Slow water movement Depth to saturated zone Slope Too acid	1.00 1.00 0.12 0.07	Somewhat limited Slow water movement Too acid Depth to saturated zone Too steep for surface application	0.96 0.91 0.43 0.32

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
83: Tiak-----	100	Very limited Slope Slow water movement Depth to saturated zone Too acid	1.00 1.00 1.00 0.07	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid Depth to saturated zone	1.00 1.00 1.00 0.96 0.91 0.43
84: Tiak-----	60	Very limited Slow water movement Depth to saturated zone Slope Too acid	1.00 1.00 0.12 0.07	Somewhat limited Slow water movement Too acid Depth to saturated zone Too steep for surface application	0.96 0.91 0.43 0.32
Antoine-----	40	Very limited Slow water movement Too acid	1.00 0.03	Somewhat limited Too acid Slow water movement Too steep for surface application	0.99 0.96 0.08
85: Tiak-----	50	Very limited Slope Slow water movement Depth to saturated zone Too acid	1.00 1.00 1.00 0.07	Very limited Too steep for surface application Too steep for sprinkler irrigation Slow water movement Too acid Depth to saturated zone	1.00 1.00 1.00 0.96 0.91 0.43
Antoine-----	40	Very limited Slope Slow water movement Too acid	1.00 1.00 0.03	Very limited Too steep for surface application Too acid Slow water movement Too steep for sprinkler irrigation	1.00 0.99 0.96 0.78

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
86: Toine-----	95	Very limited Slow water movement	1.00	Somewhat limited Too acid	0.42
87: Toine-----	95	Very limited Slow water movement Flooding	1.00 0.60	Somewhat limited Flooding Too acid	0.60 0.42
88: Una-----	100	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Slow water movement Too acid Flooding	1.00 1.00 0.99 0.60
89: Vaughn-----	90	Somewhat limited Flooding Slow water movement Too acid	0.60 0.31 0.07	Somewhat limited Flooding Too acid	0.60 0.55
90: Vaughn-----	55	Very limited Flooding Slow water movement Too acid	1.00 0.31 0.07	Very limited Flooding Too acid	1.00 0.55
Pikecreek-----	35	Very limited Flooding Cobble content	1.00 0.71	Very limited Filtering capacity Flooding Too acid Cobble content	1.00 1.00 0.14 0.01
91: Water-----	100	Not rated		Not rated	
92: Wetsaw-----	100	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Somewhat limited Depth to saturated zone Slow water movement Too acid Too steep for surface application	0.99 0.96 0.42 0.08

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
93: Woodall-----	100	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Too acid Flooding Slow water movement	1.00 0.99 0.60 0.26
94: Woodall-----	95	Very limited Slow water movement Depth to saturated zone Flooding	1.00 1.00 0.60	Very limited Depth to saturated zone Too acid Flooding Slow water movement	1.00 0.99 0.60 0.26
95: Yanush-----	90	Very limited Slow water movement Slope	1.00 0.12	Somewhat limited Too steep for surface application Too acid	0.32 0.14
96: Yanush-----	90	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 0.14
97: Yanush-----	50	Very limited Slope Slow water movement	1.00 1.00	Very limited Cobble content Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 1.00 0.14
Avant-----	35	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.16	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Cobble content Too acid	1.00 1.00 1.00 1.00 1.00 0.91

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
97: Bengal-----	15	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Cobble content Slow water movement	1.00 1.00 1.00 1.00 1.00 0.96
98: Yanush-----	50	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Cobble content Too acid	1.00 1.00 1.00 0.24 0.14
Avant-----	35	Very limited Slope Depth to bedrock Slow water movement Cobble content	1.00 1.00 1.00 0.16	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Cobble content Too acid	1.00 1.00 1.00 1.00 1.00 0.91
Bengal-----	15	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Cobble content Depth to bedrock Slow water movement	1.00 1.00 1.00 1.00 1.00 0.96
99: Yanush-----	60	Very limited Slope Slow water movement	1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	1.00 1.00 1.00 0.14

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
99: Bigfork-----	35	Very limited Slope Depth to bedrock Slow water movement Cobble content Stone content	 1.00 1.00 1.00 0.97 0.92	Very limited Cobble content Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid	 1.00 1.00 1.00 1.00 0.91
100: Yanush-----	55	Very limited Slope Slow water movement	 1.00 1.00 	Very limited Large stones on the surface Too steep for surface application Too steep for sprinkler irrigation Too acid Cobble content	 1.00 1.00 1.00 0.14 0.12
Bigfork-----	30	Very limited Slope Depth to bedrock Slow water movement Stone content Cobble content	 1.00 1.00 1.00 0.99 0.76	Very limited Too steep for surface application Too steep for sprinkler irrigation Large stones on the surface Depth to bedrock Too acid	 1.00 1.00 1.00 1.00 0.91
101: Zafra-----	40	Very limited Slope Depth to bedrock Slow water movement Too acid	 1.00 1.00 1.00 0.03	Very limited Large stones on the surface Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock Too acid	 1.00 1.00 1.00 1.00 0.67

Soil Survey of Pike County, Arkansas

Table 15c.--Agricultural Waste Management (Part 3)--Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow-rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
101: Carnasaw-----	30	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Large stones on the surface Slow water movement Too acid	1.00 1.00 1.00 1.00 0.96 0.91
Clebit-----	20	Very limited Slope Slow water movement Depth to bedrock Stone content Cobble content	1.00 1.00 1.00 0.26 0.05	Very limited Slow water movement Depth to bedrock Large stones on the surface Too steep for surface application Too steep for sprinkler irrigation	1.00 1.00 1.00 1.00 1.00 1.00

Table 16.--Engineering Properties

[Absence of an entry indicates that the data were not estimated]

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number-		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
1:	In				Pct	Pct			
Antoine-----	0-3	Loam	ML, CL-ML	A-4		0	0	100	95-100
	3-9	Silt loam	ML, CL-ML	A-4, A-6		0	0	85-100	85-100
	9-23	Loam, silty clay loam	CL	A-6		0	0	85-100	85-100
	23-35	Loam, silty clay loam, silt loam	CL	A-6, A-7		0	0	85-100	85-100
	35-47	Silt loam, silty clay loam	CL	A-7		0	0	85-100	85-100
	47-80	Clay loam, loam	CL	A-6		0	0	85-100	85-100
2:									
Avilla-----	0-4	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-4, A-2		0	0	80-90	80-90
	4-9	Loam, fine sandy loam, silt loam	ML, CL, SC- SM, SM	A-4, A-2		0	0	70-100	70-100
	9-16	Loam, clay loam, sandy clay loam	CL-ML, CL, SC	A-4, A-2, A-6		0	0	70-100	70-100
	16-34	Clay loam, sandy clay loam, loam	CL	A-4, A-2, A- 6, A-7		0	0-10	70-100	70-100
	34-44	Gravelly clay loam, clay loam, gravelly sandy clay loam, sandy clay loam	CL, GC, SC	A-2, A-6, A-7		0	0-10	85-100	65-100
	44-61	Very gravelly clay loam, gravelly loam, gravelly sandy clay loam	CL, GC, SC	A-2, A-6, A-7		0	0-5	55-85	30-80
3:									
Avilla-----	0-4	Gravelly fine sandy loam	ML, SC-SM, SM	A-4, A-2		0	0	60-85	50-80
	4-9	Loam, fine sandy loam, silt loam	ML, CL, SC- SM, SM	A-4, A-2		0	0	70-100	70-100
	9-16	Loam, clay loam, sandy clay loam	CL-ML, CL, SC	A-4, A-2, A-6		0	0	70-100	70-100
	16-34	Clay loam, sandy clay loam, loam	CL	A-4, A-2, A- 6, A-7		0	0-10	70-100	70-100
	34-44	Gravelly clay loam, sandy clay loam, sandy clay loam	CL, GC, SC	A-2, A-6, A-7		0	0-10	85-100	65-100
	44-61	Very gravelly clay loam, gravelly loam, gravelly sandy clay loam	CL, GC, SC	A-2, A-6, A-7		0	0-5	55-85	30-80

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number-			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
In					Pct	Pct				
4: Avilla-----	0-4	Gravelly fine sandy loam	ML, SC-SM, SM	A-4, A-2	0	0	75-90	75-90	65-90	
	4-9	Loam, fine sandy loam, silt loam	ML, CL, SC- SM, SM	A-4, A-2	0	0	70-100	70-100	55-98	
	9-16	Loam, clay loam, sandy clay loam	CL-ML, CL, SC	A-4, A-2, A-6	0	0	70-100	70-100	50-95	
	16-34	Clay loam, sandy clay loam, loam	CL	A-4, A-2, A- 6, A-7	0	0-10	70-100	70-100	45-98	
	34-44	Gravelly clay loam, clay loam, gravelly sandy clay loam, sandy clay loam	CL, GC, SC	A-2, A-6, A-7	0	0-10	85-100	65-100	45-98	
	44-61	Very gravelly clay loam, gravelly loam, gravelly sandy clay loam	CL, GC, SC	A-2, A-6, A-7	0	0-5	55-85	30-80	20-75	
5: Bengal-----	0-3	Cobbly silt loam	ML, CL, SC-SM	A-4	0	15-25	75-90	75-90	65-90	
	3-6	Gravelly silt loam	ML, CL, SC, SC-SM	A-4	0	0	55-80	55-80	50-80	
	6-13	Silty clay loam, silty clay, channery silty clay loam	CL, CH	A-7, A-6	0	0-20	75-100	75-100	65-10	
	13-31	Silty clay, gravelly clay	CH, CL	A-7	0	0-20	70-100	70-100	65-10	
	31-37	Channery silty clay, channery clay	CH, CL	A-7	0	10-25	70-85	65-85	60-85	
	37-40	Weathered bedrock	---	---	---	---	---	---	---	
Bismarck-----	0-6	Cobbly silt loam	CL, SC-SM	A-4, A-2-4, A-6	0	25-55	100	66-100	60-99	
	6-16	Extremely channery silt loam, very channery loam, very channery silt loam, extremely channery loam	GC, GW-GC	A-2-4, A-2-6	0	30-40	12-40	9-40	8-40	
	16-20	Weathered bedrock	---	---	---	---	---	---	---	

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
5: Yanush-----	In				Pct	Pct			
	0-5	Cobbly silt loam	ML, CL, GM	A-4, A-6	0	15-50	65-90	165-90	55-90
	5-12	Very gravelly silt loam	ML, GM, CL	A-4, A-6	0	5-10	35-55	125-55	20-55
	12-19	Very gravelly silt loam	ML, CL, GM	A-4, A-6	0	5-10	35-55	125-55	20-55
	19-33	Very gravelly silty clay loam	CL, CH, GM,	A-7, A-4	0	5-10	35-55	125-55	25-55
	33-80	Extremely gravelly silty clay loam, very gravelly silty clay loam	ML CL, GC	A-7, A-2, A-6	0	5-10	20-55	7-55	6-55
6: Bengal-----	0-3	Cobbly silt loam	ML, CL	A-4	0	15-25	75-90	175-90	65-90
	3-6	Gravelly silt loam	ML, CL, SC, SC-SM	A-4	0	0	55-80	155-80	50-80
	6-13	Silty clay loam, silty clay, channery silty clay loam	CL, CH	A-7, A-6	0	0-20	75-100	175-100	65-10
	13-31	Silty clay, gravelly clay	CH, CL	A-7	0	0-20	70-100	170-100	65-10
	31-37	Channery silty clay, channery clay	CH, CL	A-7	0	10-25	70-85	165-85	60-85
	37-40	Weathered bedrock	---	---	---	---	---	---	---
Bismarck-----	0-6	Cobbly silt loam	CL, SC-SM	A-4, A-2-4, A-6	0	25-55	100	166-100	60-99
	6-16	Extremely channery silt loam, very channery loam, very channery silt loam, extremely channery loam	GC, GW-GC	A-2-4, A-2-6	0	30-40	12-40	9-40	8-40
	16-20	Weathered bedrock	---	---	---	---	---	---	---
	0-5	Cobbly silt loam	ML, CL, GM	A-4, A-6	0	15-50	65-90	165-90	55-90
	5-12	Very gravelly silt loam	ML, CL, GM	A-4, A-6	0	5-10	35-55	125-55	20-55
	12-19	Very gravelly silt loam	ML, CL, GM	A-4, A-6	0	5-10	35-55	125-55	20-55
Yanush-----	19-33	Very gravelly silty clay loam	CL, CH, GM, ML	A-7, A-4	0	5-10	35-55	125-55	25-55
	33-80	Extremely gravelly silty clay loam, very gravelly silty clay loam	CL, GC	A-7, A-2, A-6	0	5-10	20-55	7-55	6-55

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
7: Bengal-----	In					Pct	Pct			
	0-3	Cobbly loam	ML, CL-ML	A-4		0	25-50	100	100	85-95
	3-6	Gravelly silt loam, gravelly loam	ML, CL, SC, SC-SM	A-4	0	0	55-80	55-80	50-80	50-80
	6-13	Silty clay loam, silty clay, channery silty clay loam	CL, CH	A-7, A-6	0	0-20	75-100	75-100	65-100	65-100
	13-31	Silty clay, gravelly clay	CH, CL	A-7	0	0-20	70-100	70-100	65-100	65-100
	31-37	Channery silty clay, channery clay	CH, CL	A-7	0	10-25	70-85	65-85	60-85	60-85
	37-40	Weathered bedrock	---	---	---	---	---	---	---	---
Bismarck-----	0-6	Cobbly silt loam	CL, SC-SM	A-4, A-2-4, A-6	0	25-55	100	66-100	60-99	60-99
	6-16	Extremely channery silt loam, very channery loam, very channery silt loam, extremely channery loam	GC, GW-GC	A-2-4, A-2-6	0	30-40	12-40	9-40	8-40	8-40
	16-20	Weathered bedrock	---	---	---	---	---	---	---	---
Bigfork-----	0-3	Very cobbly loam	CL, CL-ML	A-4	0	50-70	100	100	85-95	85-95
	3-7	Very cobbly loam, very gravelly loam, very cobbly silty clay loam	CL, GC, SC, CL-ML	A-4, A-6, A-2	0	25-45	40-75	40-70	35-65	35-65
	7-25	Very cobbly silty clay loam, very gravelly silty clay loam, very gravelly clay loam, very cobbly clay loam	CL, GC, SC	A-7, A-2, A-6	10-20	20-35	55-90	30-80	30-80	30-80
	25-40	Unweathered bedrock	---	---	---	---	---	---	---	---
8: Bigfork-----	0-3	Extremely stony loam	CL, CL-ML, SC, SC-SM	A-4, A-6	45-65	5-15	60-80	55-75	45-75	45-75
	3-7	Very cobbly loam, very gravelly loam, very cobbly silty clay loam	CL, GC, SC, CL-ML	A-4, A-2, A-6	0	25-45	40-75	40-70	35-65	35-65
	7-25	Very cobbly silty clay loam, very gravelly silty clay loam, very gravelly clay loam, very cobbly clay loam	CL, GC, SC	A-7, A-2, A-6	10-20	20-35	55-90	30-80	30-80	30-80
	25-40	Unweathered bedrock	---	---	---	---	---	---	---	---
Rock outcrop.										

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
9: Bigfork-----	In				Pct	Pct			
	0-3	Very stony loam	CL	A-4	50-75	0	100	100	85-95
	3-7	Very cobbly loam, very gravelly loam, very cobbly silty clay loam	CL, GC, SC, CL-ML	A-4, A-2, A-6	0	25-45	40-75	40-70	35-65
	7-25	Very cobbly silty clay loam, very gravelly silty clay loam, very gravelly clay loam, very cobbly clay loam	CL, GC, SC	A-7, A-2, A-6	10-20	20-35	55-90	30-80	30-80
	25-40	Unweathered bedrock	---	---	---	---	---	---	---
	0-5	Very stony loam	ML	A-4	20-35	15-20	60-80	60-80	60-80
	5-12	Very gravelly silt loam	ML, GM, CL	A-4, A-6	0	5-10	35-55	25-55	20-55
	12-19	Very gravelly silt loam	ML, CL, GM	A-4, A-6	0	5-10	35-55	25-55	20-55
	19-33	Very gravelly silty clay loam	CL, CH, GM, ML	A-7, A-4	0	5-10	35-55	25-55	25-55
	33-80	Extremely gravelly silty clay loam, very gravelly silty clay loam	CL, GC	A-7, A-2, A-6	0	5-10	20-55	7-55	6-55
Rock outcrop. 10, 11: Billstown-----	0-7	Loam	ML, CL-ML	A-4, A-6	0	0	100	95-100	75-100
	7-13	Gravelly silt loam	ML, CL-ML	A-4	0	0	100	55-100	50-100
	13-22	Clay	CH	A-7	0	0	100	100	80-100
	22-32	Clay	CH	A-7	0	0	100	100	75-99
	32-49	Clay	CH	A-7	0	0	100	100	90-100
	49-64	Clay	CH	A-7	0	0	100	100	90-100
	64-80	Silty clay	CH, CL	A-7	0	0	100	100	90-100
	0-7	Silt loam	ML, CL-ML	A-4, A-6	0	0	100	95-100	75-100
	7-13	Gravelly silt loam	ML, CL-ML	A-4	0	0	100	55-100	50-100
	13-22	Clay	CH	A-7	0	0	100	100	80-100
12: Billstown-----	22-32	Clay	CH	A-7	0	0	100	100	75-99
	32-49	Clay	CH	A-7	0	0	100	100	90-100
	49-64	Clay	CH	A-7	0	0	100	100	90-100
	64-80	Silty clay	CH, CL	A-7	0	0	100	100	90-100
	0-7	Silt loam	ML, CL-ML	A-4, A-6	0	0	100	95-100	75-100
	7-13	Gravelly silt loam	ML, CL-ML	A-4	0	0	100	55-100	50-100
	13-22	Clay	CH	A-7	0	0	100	100	80-100
	22-32	Clay	CH	A-7	0	0	100	100	75-99
	32-49	Clay	CH	A-7	0	0	100	100	90-100
	49-64	Clay	CH	A-7	0	0	100	100	90-100

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
12: Tiak-----	In				Pct	Pct				
	0-6	Very fine sandy loam	ML	A-4						
	6-19	Silty clay, clay, clay loam, silty clay loam	CH, CL	A-7, A-7-6	0	0	0	80-100	80-100	75-100
	19-27	Clay, clay loam, silty clay loam, silty clay	CH, CL	A-7, A-7-6			0	85-100	85-100	75-100
	27-40	Clay, clay loam, silty clay loam, silty clay	CH, CL	A-7			0	85-100	85-100	65-100
	40-80	Clay, clay loam, silty clay, silty clay loam	CH, CL	A-7	0	0	0	85-100	85-100	65-100
							0	85-100	85-100	65-100
13: Bonnerdale-----	0-3	Fine sandy loam	ML, SM	A-4						
	3-13	Fine sandy loam, sandy loam	ML, CL-ML, SC-SM, SM	A-4	0	0	0	90-100	80-100	70-100
	13-24	Fine sandy loam, sandy loam, loam	ML, CL-ML, SC-SM, SM	A-4			0	90-100	80-100	70-99
	24-35	Fine sandy loam, loam, sandy clay loam	ML, CL, SC	A-4, A-6	0	0	0	90-100	80-100	70-100
	35-43	Fine sandy loam	ML, CL, SC	A-4	0	0	0	90-100	80-100	60-85
	43-54	Fine sandy loam	ML, CL, SC	A-4	0	0	0	90-100	80-100	60-85
	54-60	Weathered bedrock	---	---	0	---	---	---	---	---
14: Carnasaw-----	0-3	Cobbly fine sandy loam	SC-SM, SC, SM	A-4, A-6	0-10	15-25	80-90	80-90	65-90	
	3-10	Cobbly fine sandy loam	SC-SM, SC, SM	A-4, A-6	0	5-25	70-85	65-85	55-80	
	10-40	Silty clay	CH, CL	A-7	0	0-10	85-95	75-95	65-95	
	40-58	Silty clay	CH, CL	A-7	0	0-10	90-95	80-90	70-90	
	58-60	Weathered bedrock	---	---	---	---	---	---	---	
Pirum-----	0-3	Stony loam	ML, CL, SC- SM, SM, CL- ML	A-4	15-30	5-10	85-100	65-100	50-95	
	3-7	Cobbly fine sandy loam, gravelly sandy loam, cobbly loam	ML, CL-ML	A-4, A-1, A-2	0-5	15-30	70-90	60-90	50-85	
	7-16	Loam, clay loam, sandy clay loam	CL, SC, SC-SM	A-6	0	0	80-100	65-100	50-90	
	16-26	Sandy clay loam	CL	A-6	0	0-15	85-95	85-95	65-85	
	26-40	Cobbly sandy clay loam	CL	A-6	0	15-30	65-90	65-90	50-85	
	40-42	Unweathered bedrock	---	---	---	---	---	---	---	

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
15: Carnasaw-----	In				Pct	Pct			
	0-3	Cobbly fine sandy loam	SC-SM, SM, SC	A-4, A-6	0	15-45	85-95	70-95	60-90
	3-10	Cobbly fine sandy loam	SC-SM, SC, SM	A-4, A-6	0	5-25	70-85	65-85	55-80
	10-40	Silty clay	CH, CL	A-7	0	0-10	85-95	75-95	65-95
	40-58	Silty clay	CH, CL	A-7	0	0-10	90-95	80-90	70-90
	58-60	Weathered bedrock	---	---	---	---	---	---	---
	0-5	Cobbly fine sandy loam	SM, SC-SM	A-4	0	25-50	75-100	60-100	50-98
	5-8	Fine sandy loam, gravelly fine sandy loam	SC-SM, SM	A-4	0	0	80-100	65-100	60-95
	8-17	Fine sandy loam, sandy loam, loam	SC-SM, SM, CL-ML	A-4	0	0	95-100	80-100	70-95
	17-27	Sandy clay loam, clay loam, loam	CL, SC	A-6, A-4	0	0	95-100	80-100	65-99
16: Carnasaw-----	27-39	Cobbly sandy clay loam	CL, GC, SC	A-6, A-7	0	15-25	65-90	65-90	55-85
	39-45	Weathered bedrock	---	---	---	---	---	---	---
	0-3	Cobbly fine sandy loam	SC-SM, SC, SM	A-4, A-6	0-15	15-40	80-90	80-90	65-90
	3-10	Cobbly fine sandy loam	SC-SM, SC, SM	A-4, A-6	0	5-25	70-85	65-85	55-80
	10-40	Silty clay	CH, CL	A-7	0	0-10	85-95	75-95	65-95
	40-58	Silty clay	CH, CL	A-7	0	0-10	90-95	80-90	70-90
	58-60	Weathered bedrock	---	---	---	---	---	---	---
	0-5	Cobbly fine sandy loam	SM, SC-SM	A-4	0	25-50	75-100	60-100	50-98
	5-8	Fine sandy loam, gravelly fine sandy loam	SC-SM, SM	A-4	0	0	80-100	65-100	60-95
	8-17	Fine sandy loam, sandy loam, loam	SC-SM, SM, CL-ML	A-4	0	0	95-100	80-100	70-95
17: Carnasaw-----	17-27	Sandy clay loam, clay loam, loam	CL, SC	A-6, A-4	0	0	95-100	80-100	65-99
	27-39	Cobbly sandy clay loam	CL, GC, SC	A-6, A-7	0	15-25	65-90	65-90	55-85
	39-45	Weathered bedrock	---	---	---	---	---	---	---
	0-3	Cobbly fine sandy loam	SC-SM, SC, SM	A-4, A-6	0	15-55	100	80-95	65-90
	3-10	Cobbly fine sandy loam	SC-SM, SC, SM	A-4, A-6	0	5-25	70-85	65-85	55-80
	10-40	Silty clay	CH, CL	A-7	0	0-10	85-95	75-95	65-95
	40-58	Silty clay	CH, CL	A-7	0	0-10	90-95	80-90	70-90
	58-60	Weathered bedrock	---	---	---	---	---	---	---
	0-5	Cobbly fine sandy loam	SM, SC-SM	A-4	0	25-50	75-100	60-100	50-98
	5-8	Fine sandy loam, gravelly fine sandy loam	SC-SM, SM	A-4	0	0	80-100	65-100	60-95

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
17: Sherwood-----	In				Pct	Pct				
	0-4	Cobbly fine sandy loam	ML	A-4, A-6	0	15-30	80-95	75-95	65-95	
	4-13	Fine sandy loam	ML	A-4, A-6	0	0-15	90-95	80-95	70-95	
	13-42	Sandy clay loam, loam, clay loam	CL, SC	A-6, A-4	0	0	85-95	80-95	60-90	
	42-45	Gravelly loam, gravelly clay loam, gravelly sandy clay loam	GC, SC	A-4, A-6	0	0	65-85	50-80	40-80	
	45-50	Weathered bedrock	---	---	---	---	---	---	---	
	50-60	Unweathered bedrock	---	---	---	---	---	---	---	
	0-2	Cobbly fine sandy loam	SM, SC-SM	A-4	0	20-48	80-95	70-95	60-95	
	2-4	Gravelly fine sandy loam	SM, SC-SM	A-4, A-1, A-2	0	7-19	65-85	60-85	50-85	
	4-9	Gravelly fine sandy loam, loam	SC, CL, SC- SM, SM	A-4, A-2	0	0-3	75-95	50-95	40-90	
Zafra-----	9-14	Very gravelly loam, gravelly clay loam, very gravelly sandy clay loam	GM, GC, GC- GM, CL-ML	A-4, A-1, A- 2, A-6	0	0-8	55-80	35-80	25-75	
	14-26	Very gravelly clay loam, gravelly loam	CL, SC, SC-SM	A-4, A-2	0	0-3	45-75	25-65	15-65	
	26-38	Very gravelly clay loam, gravelly loam, gravelly clay loam, very gravelly sandy clay loam	CL, GC, GC GM	A-4, A-2, A-6	0	0-5	45-75	25-65	20-65	
	38-42	Weathered bedrock	---	---	---	---	---	---	---	
	42-43	Unweathered bedrock	---	---	---	---	---	---	---	
	0-3	Stony fine sandy loam	SC-SM, SC, SM	A-4	20-40	5-25	85-100	70-100	60-100	
	3-10	Cobbly fine sandy loam	SC-SM, SM, SC	A-4, A-6	0	5-25	70-85	65-85	55-80	
	10-40	Silty clay	CH, CL	A-7	0	0-10	85-95	75-95	65-95	
	40-58	Silty clay	CH, CL	A-7	0	0-10	90-95	80-90	70-90	
	58-60	Weathered bedrock	---	---	---	---	---	---	---	
18: Carnasaw-----	0-3	Stony fine sandy loam	SC-SM, SC, SM	A-4	20-40	5-25	85-100	70-100	60-100	
	3-10	Cobbly fine sandy loam	SC-SM, SM, SC	A-4, A-6	0	5-25	70-85	65-85	55-80	
	10-40	Silty clay	CH, CL	A-7	0	0-10	85-95	75-95	65-95	
	40-58	Silty clay	CH, CL	A-7	0	0-10	90-95	80-90	70-90	
	58-60	Weathered bedrock	---	---	---	---	---	---	---	
	0-3	Stony fine sandy loam	SC-SM, SC, SM	A-4	20-40	5-25	85-100	70-100	60-100	
	3-10	Cobbly fine sandy loam	SC-SM, SM, SC	A-4, A-6	0	5-25	70-85	65-85	55-80	
	10-40	Silty clay	CH, CL	A-7	0	0-10	85-95	75-95	65-95	
	40-58	Silty clay	CH, CL	A-7	0	0-10	90-95	80-90	70-90	
	58-60	Weathered bedrock	---	---	---	---	---	---	---	

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
18: Zafra-----	In				Pct	Pct			
	0-2	Stony fine sandy loam	SM	A-4					
	2-4	Gravelly fine sandy loam	SM, SC-SM	A-4, A-1, A-2	15-32 0	2-13 7-19	80-95 65-85	75-95 60-85	65-95 50-85
	4-9	Gravelly fine sandy loam, loam	SC, CL, SC- SM, SM	A-4, A-2	0	0-3	75-95	50-95	40-90
	9-14	Very gravelly loam, gravelly clay loam, very gravelly sandy clay loam	GM, GC, GC- GM, CL-ML	A-4, A-1, A- 2, A-6	0	0-8	55-80	35-80	25-75
	14-26	Very gravelly clay loam, gravelly loam	CL, SC, SC-SM	A-4, A-2	0	0-3	45-75	25-65	15-65
	26-38	Very gravelly clay loam, gravelly loam, gravelly clay loam, very gravelly sandy clay loam	CL, GC, GC-GM	A-4, A-2, A-6	0	0-5	45-75	25-65	20-65
	38-42	Weathered bedrock	---	---	---	---	---	---	---
	42-43	Unweathered bedrock	---	---	---	---	---	---	---
	0-4	Very stony fine sandy loam	GM, ML, GC-GM	A-4, A-1, A-2	20-35	5-15	55-75	40-75	35-75
19: Ceda-----	4-12	Very gravelly loam, very gravelly fine sandy loam	GM, ML, GC, GC-GM	A-4, A-1, A- 2, A-6	0	5-15	30-60	25-60	20-55
	12-16	Extremely gravelly fine sandy loam, very gravelly fine sandy loam	GM	A-2	0	5-20	25-60	20-60	20-55
	16-17	Unweathered bedrock	---	---	---	---	---	---	---
	0-12	Very cobbly fine sandy loam	SC, SC-SM	A-4, A-6	0	45-69	100	100	90-95
	12-22	Very cobbly fine sandy loam	SC, SM	A-4, A-6, A- 2-4	0	45-69	100	100	85-99
	22-55	Extremely gravelly fine sandy loam	GP-GC, GC, GW	A-2-4, A-1-a, A-2-6	0	17-31	15-30	8-30	7-30
	55-80	Extremely cobbly fine sandy loam	GW-GC, GC, GP-GM	A-2-4, A-1-a, A-2-6	0	56-72	30-60	15-60	15-60

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
20: Ceda-----	In				Pct	Pct			
	0-12	Very gravelly loam	SC, SC-SM	A-4, A-6, A-2-4	0	20-45	100	100	90-95
	12-22	Very cobbly fine sandy loam	SC, SM	A-4, A-6, A-2-4	0	45-70	100	100	85-99
	22-55	Extremely gravelly fine sandy loam	GP-GC, GC, GW	A-2-4, A-1-a, A-2-6	0	15-30	15-30	8-30	7-30
	55-80	Extremely cobbly fine sandy loam	GW-GC, GC, GP-GM	A-2-4, A-1-a, A-2-6	0	55-70	30-60	15-60	15-60
21: Clebit-----	0-4	Extremely stony fine sandy loam	GM, GC-GM	A-2, A-4	35-40	30-35	60-85	25-70	20-65
	4-12	Very gravelly loam, very gravelly fine sandy loam	GM, ML, GC, GC-GM	A-4, A-1, A-2, A-6	0	5-15	30-60	25-60	20-55
	12-16	Extremely gravelly fine sandy loam, very gravelly fine sandy loam	GM	A-2	0	5-20	25-60	20-60	20-55
	16-17	Unweathered bedrock	---	---	---	---	---	---	---
Carnasaw-----	0-3	Very stony fine sandy loam	SC-SM, SC, SM	A-4, A-2, A-6	40-60	5-15	80-98	70-98	55-95
	3-10	Cobbly fine sandy loam	SC-SM, SC, SM	A-4, A-6	0	5-25	70-85	65-85	55-80
	10-40	Silty clay	CH, CL	A-7	0	0-10	85-95	75-95	65-95
	40-58	Silty clay	CH, CL	A-7	0	0-10	90-95	80-90	70-90
	58-60	Weathered bedrock	---	---	---	---	---	---	---
Pirum-----	0-3	Stony loam	ML, CL, SC-SM, SM	A-4	15-40	5-25	85-100	70-100	60-94
	3-7	Cobbly fine sandy loam, gravelly sandy loam, cobbly loam	ML, CL-ML	A-4, A-1, A-2	0-5	15-30	70-90	60-90	50-85
	7-16	Loam, clay loam, sandy clay loam	CL, SC, SC-SM	A-6	0	0	80-100	65-100	50-90
	16-26	Sandy clay loam	CL	A-6	0	0-15	85-95	85-95	65-85
	26-40	Cobbly sandy clay loam	CL	A-6	0	15-30	65-90	65-90	50-85
	40-42	Unweathered bedrock	---	---	---	---	---	---	---

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches inches	3-10	4	10	40
22: Cupco-----	In				Pct	Pct			
	0-2	Silt loam	CL-ML, CL	A-4, A-6		0	0	100	95-10
	2-25	Silt loam, silty clay loam	CL-ML, CL	A-4, A-6		0	0	100	90-10
	25-41	Silty clay loam	CL	A-7, A-6		0	0	100	95-10
	41-62	Silty clay loam	CL	A-7		0	0	100	95-10
	62-80	Silty clay loam, clay loam	CL	A-7, A-6		0	0	100	95-10
23: Dam.									
24: Dela-----	0-3	Fine sandy loam	SC-SM, SM, SC	A-4, A-6, A- 2-4	0	0	0	100	85-10
	3-8	Fine sandy loam	SC, SM	A-4, A-6, A- 2-4	0	0	0	100	85-10
	8-45	Fine sandy loam	SC-SM, SC, SM	A-4, A-6, A- 2-4	0	0	0	100	98-100
	45-51	Fine sandy loam, sandy loam, loam	SC-SM, SC, SM	A-4, A-6, A- 2-4	0	0	0	100	85-10
	51-80	Extremely gravelly fine sandy loam	GP-GC, GP, GC	A-2-4, A-1-a, A-2-6	0	0	0	25-40	5-30
25: Dela-----	0-3	Fine sandy loam	SC-SM, SC, SM	A-4, A-6, A- 2-4	0	0	0	100	85-10
	3-8	Fine sandy loam	SC, SM	A-4, A-6, A- 2-4	0	0	0	100	85-10
	8-45	Fine sandy loam	SC-SM, SC, SM	A-4, A-6, A- 2-4	0	0	0	100	98-100
	45-51	Fine sandy loam, sandy loam, loam	SC-SM, SC, SM	A-4, A-6, A- 2-4	0	0	0	100	85-10
	51-80	Extremely gravelly fine sandy loam	GP-GC, GP, GC	A-2-4, A-1-a, A-2-6	0	0	0	25-40	5-30

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
26: Delight-----	In				Pct	Pct				
	0-4	Silty clay	CL	A-7, A-7-6	0	0	80-100	80-100	75-10	
	4-8	Silty clay, silty clay loam	CH, CL	A-7, A-7-6	0	0	100	100	85-10	
	8-12	Silty clay, clay	CH, CL	A-7, A-7-6	0	0	100	100	85-10	
	12-20	Silty clay, clay	CH, CL	A-7, A-7-6	0	0	100	100	85-10	
	20-29	Silty clay, clay	CH, CL	A-7, A-7-6	0	0	100	100	85-10	
	29-41	Silty clay, clay, silty clay loam	CH, CL	A-7, A-7-6	0	0	100	100	75-10	
	41-70	Silty clay, clay, silty clay loam	CH, CL	A-7, A-7-6	0	0	100	100	75-10	
	70-84	Clay, silty clay, silty clay loam	CH, CL	A-7, A-7-6	0	0	100	100	75-10	
27: Gurdon-----	0-2	Fine sandy loam	ML, CL-ML	A-4	0	0	95-100	85-100	80-10	
	2-7	Very fine sandy loam, silt loam, loam	ML, CL-ML	A-4	0	0	95-100	85-100	80-10	
	7-21	Very fine sandy loam, silt loam, loam	ML, CL-ML	A-4, A-6	0	0	95-100	85-100	80-10	
	21-38	Silty clay loam, silt loam, loam	CL, CL-ML	A-6, A-4	0	0	85-100	75-100	65-10	
	38-80	Silty clay loam, silt loam, loam	CL, CL-ML	A-6, A-4	0	0	85-100	75-100	65-10	
28: Guyton-----	0-5	Silt loam	ML, CL-ML, CL	A-4	0	0	100	100	90-10	
	5-15	Silt loam	CL-ML, ML, CL	A-6, A-4	0	0	100	100	90-10	
	15-40	Silty clay loam, silt loam	CL, CL-ML	A-6, A-7-6	0	0	100	100	90-10	
	40-80	Silty clay loam, silt loam, clay loam	CL, CL-ML	A-6, A-7-6	0	0	100	100	90-10	
29: Guyton-----	0-5	Silt loam	ML, CL, CL-ML	A-4	0	0	100	100	90-10	
	5-15	Silt loam	CL-ML, ML, CL	A-6, A-4	0	0	100	100	90-10	
	15-40	Silty clay loam, silt loam	CL, CL-ML	A-6, A-7-6	0	0	100	100	90-10	
	40-80	Silty clay loam, silt loam, clay loam	CL, CL-ML	A-6, A-7-6	0	0	100	100	90-10	

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
30: Guyton-----	In				Pct	Pct				
	0-5	Silt loam	ML, CL, CL-ML	A-4		0	0	100	100	90-10
	5-15	Silty loam	CL-ML, ML, CL	A-6, A-4		0	0	100	100	90-10
	15-40	Silty clay loam, silt loam	CL, CL-ML	A-6, A-7-6		0	0	100	100	90-10
	40-80	Silty clay loam, silt loam, clay loam	CL, CL-ML	A-6, A-7-6		0	0	100	100	90-10
31: Japan-----										
	0-6	Silty clay loam	CL, CH	A-7		0	0	100	100	95-10
	6-12	Silty clay loam	CL, CH	A-7, A-6		0	0	90-100	90-100	85-10
	12-22	Silty clay, clay, silty clay loam	CH, CL	A-7, A-7-6		0	0	90-100	90-100	85-10
	22-37	Silty clay	CH	A-7		0	0	90-100	90-100	80-10
	37-55	Silty clay	CH	A-7		0	0	85-100	85-100	80-10
	55-80	Silty clay, clay	CH	A-7		0	0	90-100	90-100	85-10
32, 33: Kenn-----										
	0-6	Fine sandy loam	SC, GC, GC-GM	A-2-4, A-1-b, A-6		0	0	55-80	55-80	45-75
	6-12	Gravelly loam, gravelly fine sandy loam	SC, GC-GM, CL	A-4, A-2-4, A-6		0	0	65-85	55-85	45-80
	12-28	Gravelly sandy clay loam, clay loam, gravelly clay loam	SC	A-6, A-2-6, A-7-6		0	0-5	75-95	60-95	50-85
	28-42	Very gravelly loam, very gravelly clay loam	GC	A-2-6, A-7-6		0	5-15	50-65	35-60	30-55
	42-80	Extremely gravelly loam, very gravelly loam, very gravelly fine sandy loam	GC, GP	A-1-a, A-2-6, A-6		0	0-10	30-60	8-55	6-55
34: Kenn-----										
	0-6	Very fine sandy loam	SC, SC-SM	A-4, A-2-4, A-6		0	0	80-100	80-100	70-98
	6-12	Gravelly loam, gravelly fine sandy loam	SC, GC-GM, CL	A-4, A-2-4, A-6		0	0	65-85	55-85	45-80
	12-28	Gravelly sandy clay loam, clay loam gravelly clay loam	SC	A-6, A-2-6, A-7-6		0	0-5	75-95	60-95	50-85
	28-42	Very gravelly loam, very gravelly clay loam	GC	A-2-6, A-7-6		0	5-15	50-65	35-60	30-55
	42-80	Extremely gravelly loam, very gravelly loam, very gravelly fine sandy loam	GC, GP	A-1-a, A-2- 6, A-6		0	0-10	30-60	8-55	6-55

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
In									
35: Kenn-----	0-6	Cobbly fine sandy loam	SC, SM	A-2-4, A-6	0	15-35	75-90	165-90	55-90
	6-12	Gravelly loam, gravelly fine sandy loam	SC, GC-GM, CL	A-4, A-2-4, A-6	0	0	65-85	55-85	45-80
	12-28	Gravelly sandy clay loam, clay loam	SC	A-6, A-2-6, A-7-6	0	0-5	75-95	160-95	50-85
		Gravelly clay loam							
	28-42	Very gravelly loam, very gravelly clay loam	GC	A-2-6, A-7-6	0	5-15	50-65	35-60	30-55
	42-80	Extremely gravelly loam, very gravelly loam, very gravelly fine sandy loam	GC, GP	A-1-a, A-2-6, A-6	0	0-10	30-60	8-55	6-55
Ceda-----	0-12	Very cobbly fine sandy loam	SC, SC-SM	A-4, A-6	0	45-69	100	100	90-95
	12-22	Very cobbly fine sandy loam	SC, SM	A-4, A-6, A-2-4	0	45-69	100	100	85-99
	22-55	Extremely gravelly fine sandy loam	GP-GC, GC, GW	A-2-4, A-1-a, A-2-6	0	17-31	15-30	8-30	7-30
	55-80	Extremely cobbly fine sandy loam	GW-GC, GC, GP-GM	A-2-4, A-1-a, A-2-6	0	56-72	30-60	15-60	15-60
36: Kizzia-----	0-4	Silt loam	ML, CL-ML, CL	A-4	0	0	100	95-100	90-100
	4-7	Silt loam, very fine sandy loam	CL-ML, CL, ML	A-4	0	0	100	95-100	90-100
	7-12	Silt loam, silty clay loam, clay loam, very fine sandy loam, loam	CL	A-6, A-4, A-7-6	0	0	100	95-100	90-100
	12-36	Loam, silt loam, silty clay loam	CL	A-6, A-4, A-7-6	0	0	100	95-100	90-100
	36-80	Loam, silt loam, silty clay loam, fine sandy loam	CL	A-6, A-4, A-7-6	0	0	100	95-100	90-100
37: Leeper-----	0-3	Silty clay loam	CL, CH	A-7-6, A-6	0	0	100	100	95-100
	3-10	Silty clay	CH, CL	A-7-6, A-6	0	0	100	100	90-100
	10-51	Clay	CH	A-7-6	0	0	100	100	80-100
	51-95	Clay, silty clay, silty clay loam	CH, CL	A-7-6	0	0	100	100	90-100

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number-				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
In					Pct	Pct					
38: Littlefir-----	0-2	Silt loam	CL, ML	A-4, A-6		0	0		80-100	80-100	65-95
	2-9	Silt loam	CL, CL-ML	A-4, A-6		0	5-20		85-100	85-100	75-95
	9-35	Silty clay, clay	CH, CL	A-7-6		0	0		90-100	85-100	80-10
	35-43	Channery silty clay, channery silty clay, gravelly clay	CH, CL	A-7-6		0	0		75-90	75-90	65-90
	43-50	Weathered bedrock	---	---		---	---		---	---	---
Carnasaw-----	0-3	Silt loam	CL, CL-ML	A-4		0	0		80-100	70-100	60-99
	3-10	Cobbly silt loam	CL, CL-ML	A-4, A-6		0	5-25		70-85	65-85	55-85
	10-40	Silty clay	CH, CL	A-7		0	0-10		85-95	75-95	65-95
	40-58	Silty clay	CH, CL	A-7		0	0-10		90-95	80-90	70-90
	58-60	Weathered bedrock	---	---		---	---		---	---	---
39: Magnet-----	0-8	Cobbly silt loam	GC, CL, CL- ML, GC-GM	A-4		20-40	0-10		60-80	55-75	50-70
	8-23	Cobbly clay, gravelly clay loam, cobbly silty clay	CH, CL, GC, SC	A-7		0-5	0-20		60-100	55-100	50-95
	23-31	Cobbly clay loam	CL, CH, GC, SC	A-7, A-6		0-5	0-20		60-100	55-100	50-95
	31-72	Weathered bedrock	---	---		---	---		---	---	---
	40: Marietta-----	0-16	Loam	CL, CL-ML	A-6, A-4, A- 7-6		0	0		100	100
41, 42: Mazarn-----	16-29	Silty clay loam	CL, CH	A-7-6, A-6		0	0		100	100	95-10
	29-57	Silty clay loam	CL	A-7-6, A-6		0	0		100	100	95-10
	57-72	Silty clay loam	CL	A-7-6, A-6		0	0		100	100	95-10
	72-85	Loam	CL	A-6, A-4		0	0		100	100	80-90
	0-4	Silt loam	CL, CL-ML	A-4		0	0		95-100	90-100	75-10
41, 42: Mazarn-----	4-10	Silt loam, loam, silty clay loam	CL, ML	A-6, A-4		0	0		95-100	90-100	70-99
	10-21	Silty clay loam, silt loam, loam	CL, CL-ML	A-7, A-4, A-6		0	0		95-100	80-100	65-10
	21-36	Silty clay loam, silt loam, gravelly loam	CL, CL-ML	A-7, A-6		0	0		100	100	85-10
	36-40	Weathered bedrock	---	---		---	---		---	---	---

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
43: McCaskill-----	In				Pct	Pct			
	0-4	Fine sandy loam	ML, SM, CL	A-4, A-6	0	0	75-100	75-100	70-10
	4-13	Silt loam	ML, CL	A-4, A-6	0	0	80-100	80-100	75-10
	13-23	Silt loam, fine sandy loam, loam	CL-ML, CL, ML	A-4, A-6	0	0	80-100	80-100	75-10
	23-37	Silt loam, fine sandy loam	CL, ML	A-4, A-6	0	0	80-100	80-100	70-10
	37-61	Silt loam, fine sandy loam, sandy loam	CL, SM	A-6, A-4	0	0	80-100	80-100	65-10
	61-80	Loam, sandy loam, sandy clay loam	CL, SM	A-6, A-4	0	0	80-100	80-100	65-10
44: Mena-----	0-5	Gravelly silt loam	CL, GM, ML	A-4, A-2-4, A-7-6	0	0-5	60-80	55-80	45-80
	5-12	Loam	CL, ML, SM	A-4, A-7-6	0	0-5	90-100	85-100	70-10
	12-19	Silty clay loam, silt loam, loam	CL, CL-ML, CH	A-7-6, A-4	0	0-5	90-100	85-100	65-10
	19-31	Silty clay, silty clay loam, clay	CH, CL	A-7-6, A-6	0	0-5	90-100	85-100	65-10
	31-62	Gravelly silty clay, cobbly clay loam, very cobbly clay loam	CH, GC	A-7-6, A-6	0-3	0-40	65-75	50-75	40-75
	62-80	Weathered bedrock	---	---	---	---	---	---	---
45: Mena-----	0-5	Gravelly silt loam	CL, GM, ML	A-4, A-2-4, A-7-6	0	0-5	60-80	55-80	45-80
	5-12	Loam	CL, ML, SM	A-4, A-7-6	0	0-5	90-100	85-100	70-10
	12-19	Silty clay loam, silt loam, loam	CL, CL-ML, CH	A-7-6, A-4	0	0-5	90-100	85-100	65-10
	19-31	Silty clay, silty clay loam, clay	CH, CL	A-7-6, A-6	0	0-5	90-100	85-100	65-10
	31-62	Gravelly silty clay, cobbly clay loam, very cobbly clay loam	CH, GC	A-7-6, A-6	0-3	0-40	65-75	50-75	40-75
	62-80	Weathered bedrock	---	---	---	---	---	---	---

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
46: Mena-----	In				Pct	Pct			
	0-5	Silt loam	CL, ML	A-4, A-7-6	0	0-5	90-100	85-100	70-100
	5-12	Loam	CL, ML, SM	A-4, A-7-6	0	0-5	90-100	85-100	70-100
	12-19	Silty clay loam, silt loam, loam	CL, CL-ML, CH	A-7-6, A-4	0	0-5	90-100	85-100	65-100
	19-31	Silty clay, silty clay loam, clay	CH, CL	A-7-6, A-6	0	0-5	90-100	85-100	65-100
	31-62	Gravelly silty clay, cobbly clay loam, very cobbly clay loam	CH, GC	A-7-6, A-6	0-3	0-40	65-75	50-75	40-75
	62-80	Weathered bedrock	---	---	---	---	---	---	---
47: Murfreesboro----	0-6	Gravelly loam	CL, GC	A-6, A-2-4, A-7-6	0	0	60-75	50-75	50-75
	6-31	Clay loam, loam, sandy clay loam, gravelly clay loam, gravelly loam, gravelly sandy clay loam	CL, GC	A-7-6, A-2-6	0	0	60-100	50-100	40-95
	31-42	Clay loam, loam, sandy clay loam, gravelly clay loam, gravelly loam, gravelly sandy clay loam	CL, GC	A-7-6, A-2-6	0	0	60-100	50-100	35-90
	42-80	Loam, clay loam, sandy clay loam, very gravelly clay loam, gravelly loam, very gravelly sandy clay loam, gravelly clay loam, very gravelly loam, gravelly sandy clay loam	SC, CL, GC	A-6, A-7-6, A-2-6	0	0	40-100	25-100	25-99

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
48: Murfreesboro----	In				Pct	Pct			
	0-6	Loam	CL	A-6, A-7-6, A-4	0	0	85-100	75-100	75-100
	6-31	Clay loam, loam, sandy clay loam, gravelly clay loam, gravelly loam, gravelly sandy clay loam	CL, GC	A-7-6, A-2-6	0	0	60-100	50-100	40-95
	31-42	Clay loam, loam, sandy clay loam, gravelly clay loam, gravelly loam, gravelly sandy clay loam	CL, GC	A-7-6, A-2-6	0	0	60-100	50-100	35-90
	42-80	Loam, clay loam, sandy clay loam, very gravelly clay loam, gravelly loam, very gravelly sandy clay loam, gravelly clay loam, very gravelly loam, gravelly sandy clay loam	SC, CL, GC	A-6, A-2-6, A-7-6	0	0	40-100	25-100	25-99
49: Nathan-----	0-7	Fine sandy loam	ML, SC-SM	A-4, A-6	0	0	100	100	95-100
	7-14	Silt loam	ML, SC-SM	A-4, A-6	0	0	100	100	95-100
	14-19	Silt loam	ML	A-4, A-6	0	0	100	100	95-100
	19-26	Silty clay loam	CL, SC-SM	A-6, A-7-6	0	0	100	100	95-100
	26-35	Silty clay loam	CL	A-6, A-7-6	0	0	85-100	80-100	80-100
	35-50	Silt loam	CL	A-6, A-4	0	0-7	75-100	75-100	75-100
	50-80	Silt loam	ML	A-4, A-6	0	0	100	100	90-100
50: Nashoba-----	0-4	Gravelly fine sandy loam	SC-SM, SM, SC	A-2-4, A-1-b, A-2-6	0	0-20	70-85	45-80	40-75
	4-28	Very gravelly fine sandy loam, stony sandy loam	GC-GM, GC, GW-GM	A-2-4, A-1-a, A-2-6	0	0-10	50-55	30-55	25-55
	28-53	Fine sandy loam	SC, SM	A-4, A-6, A- 2-4	0	0	100	100	85-99
	53-55	Unweathered bedrock	---	---	---	---	---	---	---

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
50: Bismarck-----	In				Pct	Pct			
	0-6	Gravelly silt loam	SC, CL, SC-SM	A-4, A-2-4, A-6	0	0-5	70-85	50-80	45-75
	6-16	Extremely channery silt loam, very channery loam, very channery silt loam, extremely channery loam	GC, GW-GC	A-2-4, A-2-6	0	30-40	12-40	9-40	8-40
	16-20	Weathered bedrock	---	---	---	---	---	---	---
	0-2	Gravelly silt loam	GC, GC-GM, CL	A-4, A-6, A- 2-4	0	0	60-85	40-75	35-75
51: Nashoba-----	2-9	Silt loam	CL, CL-ML	A-4, A-6	0	5-20	85-100	85-100	75-95
	9-35	Silty clay, clay	CH, CL	A-7-6	0	0	90-100	85-100	80-10
	35-43	Channery silty clay, channery silty clay, gravelly clay	CH, CL	A-7-6	0	0	75-90	75-90	65-90
	43-50	Weathered bedrock	---	---	---	---	---	---	---
	0-4	Cobbly fine sandy loam	SC, SC-SM	A-2-4, A-6	0	20-45	75-100	60-100	55-97
Bismarck-----	4-28	Very gravelly fine sandy loam, stony sandy loam	GC-GM, GC, GW-GM	A-2-4, A-1-a, A-2-6	0	0-10	50-55	30-55	25-55
	28-53	Fine sandy loam	SC, SM	A-4, A-2-4, A-6	0	0	100	100	85-99
	53-55	Unweathered bedrock	---	---	---	---	---	---	---
	0-6	Cobbly silt loam	CL, SC-SM	A-4, A-2-4, A-6	0	25-55	100	66-100	60-99
	6-16	Extremely channery silt loam, very channery loam, very channery silt loam, extremely channery loam	GC, GW-GC, GC-GM	A-2-4, A-2-6	0	30-40	12-40	9-40	8-40
Littlefir-----	16-20	Weathered bedrock	---	---	---	---	---	---	---
	0-2	Cobbly silt loam	CL, SC-SM	A-4, A-6	0	15-40	75-90	60-90	50-90
	2-9	Silt loam	CL, CL-ML	A-4, A-6	0	5-20	85-100	85-100	75-95
	9-35	Silty clay, clay	CH, CL	A-7-6	0	0	90-100	85-100	80-10
	35-43	Channery silty clay, channery silty clay, gravelly clay	CH, CL	A-7-6	0	0	75-90	75-90	65-90
	43-50	Weathered bedrock	---	---	---	---	---	---	---

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
52: Nashoba-----	In				Pct	Pct				
	0-4	Stony fine sandy loam	SC-SM, SM, SC	A-2-4, A-6	15-35	0-5	100	80-95	70-95	
	4-28	Very gravelly fine sandy loam, stony sandy loam	GC-GM, GW- GM, GC	A-2-4, A-1-a, A-2-6	0	0-10	50-55	30-55	25-55	
	28-53	Fine sandy loam	SC, SM	A-4, A-2-4, A-6	0	0	100	100	85-99	
	53-55	Unweathered bedrock	---	---	---	---	---	---	---	
	0-2	Stony fine sandy loam, gravelly fine sandy loam	SC, SC-SM	A-4, A-6, A- 2-4	15-25	5-25	80-100	75-100	65-98	
	2-9	Fine sandy loam	SC, CL, SC-SM	A-4, A-2-4, A-6	0	0	80-100	75-100	70-10	
	9-35	Silty clay, clay	CH, CL	A-7-6	0	0	90-100	85-100	80-10	
	35-43	Channery silty clay, channery silty clay, gravelly clay	CH, CL	A-7-6	0	0	75-90	75-90	65-90	
	43-50	Weathered bedrock	---	---	---	---	---	---	---	
53: Neff-----	0-5	Stony fine sandy loam, gravelly fine sandy loam	ML, CL, CL-ML	A-4	15-25	0-15	65-90	65-90	60-90	
	5-8	Fine sandy loam, gravelly fine sandy loam	SC-SM, CL- ML, ML, SM	A-4	0	0	80-100	65-100	60-95	
	8-17	Fine sandy loam, sandy loam, loam	SC-SM, CL- ML, ML, SM	A-4	0	0	95-100	80-100	70-95	
	17-27	Sandy clay loam, clay loam, loam	CL-ML, CL, SC	A-6, A-4	0	0	95-100	80-100	65-99	
	27-39	Cobbly sandy clay loam	CL, GC, SC	A-6, A-7	0	0-25	65-100	65-100	55-95	
	39-45	Weathered bedrock	---	---	0	---	---	---	---	
	0-2	Loam	CL	A-6, A-4, A- 7-6	0	0	100	100	95-10	
	2-14	Silt loam, silty clay loam	CL, CL-ML	A-6, A-4, A- 7-6	0	0	100	100	90-10	
	14-26	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	90-10	
	26-48	Silty clay loam	CL	A-7-6, A-6	0	0	100	100	95-10	
	48-80	Silty clay loam	CL	A-7-6, A-6	0	0	100	100	95-10	

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
54: Ochlockonee-----	In				Pct	Pct			
	0-4	Fine sandy loam	SC-SM, SM, SC	A-4, A-6, A-2-4	0	0	100	95-100	65-85
	4-39	Sandy loam, fine sandy loam, silt loam	SC, SC-SM	A-4, A-2-4, A-6	0	0	100	95-100	85-100
	39-55	Fine sandy loam, loamy sand, sandy loam	SC, SM	A-4, A-2-4, A-6	0	0	100	95-100	95-100
	55-80	Loamy sand	SM, SC-SM	A-2-4	0	0	100	100	75-85
55, 56: Ochlockonee-----	0-4	Fine sandy loam	SC-SM, SM, SC	A-4, A-2-4, A-6	0	0	100	95-100	65-85
	4-39	Sandy loam, fine sandy loam, silt loam	SC, SC-SM	A-4, A-2-4, A-6	0	0	100	95-100	85-100
	39-55	Fine sandy loam, loamy sand, sandy loam	SC, SM	A-4, A-2-4, A-6	0	0	100	95-100	95-100
	55-80	Loamy sand	SM, SC-SM	A-2-4	0	0	100	100	75-85
57, 58: Ouachita-----	0-9	Silt loam	CL-ML, ML, CL	A-4	0	0	100	100	90-100
	9-38	Silty clay loam, loam	CL, CL-ML	A-4, A-6	0	0	100	100	75-100
	38-52	Silty clay loam	CL, CH	A-7-6, A-6	0	0	100	100	95-100
	52-77	Silty clay loam, silt loam	CL	A-7-6, A-6	0	0	100	100	95-100
	77-88	Loam, silt loam, silty clay loam	CL, CL-ML	A-6, A-4, A-7-6	0	0	100	100	85-100
59: Ozan-----	0-1	Fine sandy loam	SM, SC-SM	A-4, A-2-4	0	0	95-100	90-100	75-95
	1-7	Fine sandy loam, loam, silt loam	SC-SM, SC, SM	A-6, A-4, A-2-4	0	0	95-100	90-100	75-98
	7-15	Fine sandy loam, loam, sandy clay loam	SC, SM	A-4, A-6, A-2-4	0	0	95-100	90-100	75-99
	15-24	Fine sandy loam	SC-SM, SM, SC	A-4, A-2-4, A-6	0	0	100	100	85-98
	24-80	Fine sandy loam	SC-SM, SC, SM	A-4, A-2-4, A-6	0	0	100	100	85-98

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
60: Ozan-----	In				Pct	Pct				
	0-1	Fine sandy loam	SM, SC-SM	A-4, A-2-4	0	0	0	95-100	90-100	75-95
	1-7	Fine sandy loam, loam, silt loam	SC-SM, SC, SM	A-6, A-4, A- 2-4	0	0	0	95-100	90-100	75-98
	7-15	Fine sandy loam, loam, sandy clay loam	SC, SM	A-4, A-2-4,	0	0	0	95-100	90-100	75-99
	15-24	Fine sandy loam	SC-SM, SM, SC	A-4, A-2-4,	0	0	0	100	100	85-98
	24-80	Fine sandy loam	SC-SM, SC, SM	A-4, A-2-4, A-6	0	0	0	100	100	85-98
61, 62, 63: Peanutrock-----	0-4	Very gravelly fine sandy loam	GC, GP-GM	A-2-4, A-1-a, A-6	0	0	0	30-75	25-75	25-75
	4-10	Very gravelly fine sandy loam, gravelly sandy clay loam, gravelly loam	GC, GP-GC	A-2-6, A-1-a, A-6	0	0-16	0	30-80	25-80	20-75
	10-33	Very gravelly loam, extremely gravelly fine sandy loam	GC, GP-GC	A-2-6, A-1-a, A-6	0	6-27	0	20-60	15-60	15-55
	33-80	Extremely gravelly loamy sand, extremely gravelly sandy clay loam, extremely gravelly sandy loam	GP-GM, GP, GC	A-2-6, A-1-a	0	6-31	0	15-60	10-60	8-60
	0-4	Very gravelly fine sandy loam	GC, GP-GM	A-2-4, A-1-a, A-6	0	0	0	30-75	25-75	25-75
	4-10	Very gravelly fine sandy loam, gravelly sandy clay loam gravelly loam	GC, GP-GC	A-2-6, A-1-a, A-6	0	0-16	0	30-80	25-80	20-75
64: Peanutrock-----	10-33	Very gravelly loam, extremely gravelly fine sandy loam	GC, GP-GC	A-2-6, A-1-a, A-6	0	6-27	0	20-60	15-60	15-55
	33-80	Extremely gravelly loamy sand, extremely gravelly sandy clay loam, extremely gravelly sandy loam	GP-GM, GP, GC	A-2-6, A-1-a	0	6-31	0	15-60	10-60	8-60
	0-4	Very gravelly fine sandy loam	GC, GP-GM	A-2-4, A-1-a, A-6	0	0	0	30-75	25-75	25-75
	4-10	Very gravelly fine sandy loam, gravelly sandy clay loam gravelly loam	GC, GP-GC	A-2-6, A-1-a, A-6	0	0-16	0	30-80	25-80	20-75
	10-33	Very gravelly loam, extremely gravelly fine sandy loam	GC, GP-GC	A-2-6, A-1-a, A-6	0	6-27	0	20-60	15-60	15-55
	33-80	Extremely gravelly loamy sand, extremely gravelly sandy clay loam, extremely gravelly sandy loam	GP-GM, GP, GC	A-2-6, A-1-a	0	6-31	0	15-60	10-60	8-60

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number-				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
64: Tiak-----	In					Pct	Pct				
	0-6	Very fine sandy loam	ML	A-4			0	0	80-100	80-100	75-100
	6-19	Silty clay, clay, clay loam, silty clay loam	CH, CL	A-7, A-7-6			0	0	85-100	85-100	75-100
	19-27	Clay, clay loam, silty clay loam, silty clay	CH, CL	A-7, A-7-6			0	0	85-100	85-100	65-100
	27-40	Clay, clay loam, silty clay loam, silty clay	CH, CL	A-7			0	0	85-100	85-100	65-100
	40-80	Clay, clay loam, silty clay, silty clay loam	CH, CL	A-7			0	0	85-100	85-100	65-100
65: Pikecity-----	0-3	Silt loam	SM, ML	A-4			0	0	83-100	82-100	69-100
	3-6	Silt loam	SC, CL, SC- SM, CL-ML	A-4, A-6			0	0	76-100	75-100	64-100
	6-22	Clay loam	SC, SM, GM	A-4, A-6			0	0	75-100	74-100	74-100
	22-31	Gravelly clay loam, loam, gravelly loam	SC, SM, GM, SC-SM	A-6, A-4, A- 2, A-1-b			0	0	85-100	38-75	32-74
	31-48	Gravelly clay loam, gravelly sandy clay loam, gravelly clay	GW-GM, GM, SW-SM, SM	A-6, A-4, A- 2, A-1-b			0	0	79-91	5-68	4-68
	48-80	Very gravelly clay loam, very gravelly sandy clay loam, cobbly clay loam	GM, GW-GM, SW-SM, SM	A-6, A-4, A- 2, A-1-b			0	0-5	70-81	5-59	4-58

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number-			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
66: Pikecreek-----	In									
	0-4	Gravelly loamy sand	SM, GM	A-1, A-2		0	3-23	48-84	46-83	31-65
	4-20	Extremely gravelly loamy sand, very gravelly loamy sand, very cobbly loamy sand, very cobbly coarse sand, extremely gravelly coarse sand, very gravelly coarse sand, very gravelly loamy coarse sand, extremely gravelly loamy coarse sand, very cobbly loamy coarse sand	GP-GM, GM	A-1, A-2		0	3-30	15-52	12-51	9-43
	20-33	Extremely gravelly loamy sand, very cobbly loamy sand, very cobbly coarse sand, extremely gravelly coarse sand, very gravelly loamy sand, very gravelly loamy coarse sand, extremely gravelly loamy coarse sand, very cobbly loamy coarse sand	GP-GM, GM	A-1, A-2		0	3-30	15-52	12-51	9-43
	33-80	Extremely cobbly coarse sand, very gravelly loamy sand, very gravelly coarse sand, very cobbly loamy sand, very cobbly coarse sand, very gravelly loamy coarse sand, extremely gravelly loamy coarse sand, extremely gravelly coarse sand, extremely cobbly loamy sand, extremely cobbly loamy coarse sand, extremely gravelly loamy sand, very cobbly loamy coarse sand	GP-GM	A-1, A-2		0	7-38	14-61	10-59	5-33

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
67: Pirum-----	In				Pct	Pct			
	0-3	Fine sandy loam	ML, CL-ML, CL, SC-SM, SM	A-4	0	0	80-100	70-100	60-98
	3-7	Fine sandy loam, gravelly sandy loam, cobbly loam	ML, CL, SC- SM, SM	A-4, A-2	0	0	80-100	65-100	55-10
	7-16	Loam	ML, CL, CL- ML, SC, SC- SM	A-4, A-2, A-6	0	0	80-100	70-100	50-90
	16-26	Sandy clay loam	CL	A-7	0	0-15	85-95	85-95	65-85
	26-40	Cobbly sandy clay loam	CL	A-7	0	15-30	65-90	65-90	50-85
	40-42	Unweathered bedrock	---	---	---	---	---	---	---
	0-5	Fine sandy loam, gravelly fine sandy loam	ML, SM	A-4	0	0	80-100	65-100	60-10
	5-8	Fine sandy loam, gravelly fine sandy loam	SC-SM, CL- ML, ML, SM	A-4	0	0	80-100	65-100	60-95
	8-17	Fine sandy loam, sandy loam, loam	SC-SM, CL- ML, ML, SM	A-4	0	0	95-100	80-100	70-95
Bonnerdale-----	17-27	Sandy clay loam, clay loam, loam	CL-ML, CL, SC	A-6, A-4	0	0	95-100	80-100	65-99
	27-39	Cobbly sandy clay loam	CL, GC, SC	A-6, A-7	0	0-25	65-100	65-100	55-95
	39-45	Weathered bedrock	---	---	---	---	---	---	---
	0-3	Fine sandy loam	ML, SM	A-4	0	0	90-100	80-100	70-10
	3-13	Fine sandy loam, sandy loam	ML, CL-ML, SC-SM, SM	A-4	0	0	90-100	80-100	70-10
	13-24	Fine sandy loam, sandy loam, loam	ML, CL-ML, SC-SM, SM	A-4	0	0	90-100	80-100	70-99
	24-35	Fine sandy loam, loam, sandy clay loam	ML, CL, SC	A-4, A-6	0	0	90-100	80-100	70-10
	35-43	Fine sandy loam	ML, CL, SC	A-4	0	0	90-100	80-100	60-85
	43-54	Fine sandy loam	ML, CL, SC	A-4	0	0	90-100	80-100	60-85
	54-60	Weathered bedrock	---	---	0	---	---	---	---
68: Pits. Udorthents.									

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
69: Riverwash.	In				Pct	Pct			
	0-12	Very cobbly fine sandy loam	SC, SC-SM	A-4, A-6	0	45-69	100	100	90-95
	12-22	Very cobbly fine sandy loam	SC, SM	A-4, A-6, A- 2-4	0	45-69	100	100	85-99
	22-55	Extremely gravelly fine sandy loam	GP-GC, GC, GW	A-2-4, A-1-a, A-2-6	0	17-31	15-30	8-30	7-30
	55-80	Extremely cobbly fine sandy loam	GW-GC, GC, GP-GM	A-2-4, A-1-a, A-2-6	0	56-72	30-60	15-60	15-60
70, 71: Sardis-----	0-10	Silt loam	CL, CL-ML	A-6, A-4, A- 7-6	0	0	100	100	90-100
	10-20	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	90-100
	20-61	Silty clay loam, silt loam	CL	A-7-6, A-6	0	0	100	100	90-100
	61-73	Silt loam, silty clay loam	CL	A-6, A-7-6	0	0	100	100	90-100
	73-80	Silty clay loam, loam, silt loam, sandy loam	CL, CL-ML	A-6, A-4, A- 7-6	0	0	100	95-100	75-100
72: Sherless-----	0-5	Gravelly fine sandy loam, cobbly fine sandy loam	ML	A-4	0	0-25	55-90	50-90	45-90
	5-8	Fine sandy loam, gravelly fine sandy loam	SC-SM, CL- ML, ML, SM	A-4	0	0	80-100	65-100	60-95
	8-17	Fine sandy loam, sandy loam, loam	SC-SM, CL- ML, ML, SM	A-4	0	0	95-100	80-100	70-95
	17-27	Sandy clay loam, clay loam, loam	CL-ML, CL, SC	A-6, A-4	0	0	95-100	80-100	65-99
	27-39 39-45	Cobbly sandy clay loam Weathered bedrock	CL, GC, SC ---	A-6, A-7 ---	0 ---	15-25 ---	65-90 ---	65-90 ---	55-85 ---
Littlefir-----	0-2	Gravelly fine sandy loam, cobbly fine sandy loam	SC, SC-SM	A-2-4, A-6, A-1-b	0	5-25	60-85	50-85	40-80
	2-9	Fine sandy loam	SC, CL, SC-SM	A-4, A-2-4, A-6	0	0	80-100	75-100	70-100
	9-35	Silty clay, clay	CH, CL	A-7-6	0	0	90-100	85-100	80-100
	35-43	Channery silty clay, channery silty clay, gravelly clay	CH, CL	A-7-6	0	0	75-90	75-90	65-90
	43-50	Weathered bedrock	---	---	---	---	---	---	---

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
73: Sherless-----	In				Pct	Pct			
	0-5	Cobbly fine sandy loam	SM, SC-SM	A-4		0	25-50	75-100	60-100
	5-8	Fine sandy loam, gravelly fine sandy loam	SC-SM, SM	A-4		0	0	80-100	65-100
	8-17	Fine sandy loam, sandy loam, loam	SC-SM, SM, CL-ML	A-4		0	0	95-100	80-100
	17-27	Sandy clay loam, clay loam, loam	CL, SC	A-6, A-4		0	0	95-100	80-100
	27-39	Cobbly sandy clay loam	CL, GC, SC	A-6, A-7		0	15-25	65-90	65-90
	39-45	Weathered bedrock	---	---		---	---	---	---
	0-2	Cobbly fine sandy loam	SC, SC-SM	A-2-4, A-6		0	20-45	85-100	75-100
	2-9	Fine sandy loam	SC, CL, SC-SM	A-4, A-2-4, A-6		0	0	80-100	75-100
	9-35	Silty clay, clay	CH, CL	A-7-6		0	0	90-100	85-100
Littlefir-----	35-43	Channery silty clay, channery silty clay, gravelly clay	CH, CL	A-7-6		0	0	75-90	75-90
	43-50	Weathered bedrock	---	---		---	---	---	---
	0-4	Cobbly fine sandy loam	SC, SC-SM	A-2-4, A-6		0	20-45	75-100	60-100
	4-28	Very gravelly fine sandy loam, stony sandy loam	GC-GM, GW- GM, GC	A-2-4, A-1-a, A-2-6		0	0-11	50-55	30-55
	28-53	Fine sandy loam	SC, SM	A-4, A-2-4, A-6		0	0	100	100
	53-55	Unweathered bedrock	---	---		---	---	---	---
	0-5	Cobbly fine sandy loam	SM, SC-SM	A-4		0	25-50	75-100	60-100
	5-8	Fine sandy loam, gravelly fine sandy loam	SC-SM, SM	A-4		0	0	80-100	65-100
	8-17	Fine sandy loam, sandy loam, loam	SC-SM, SM, CL-ML	A-4		0	0	95-100	80-100
	17-27	Sandy clay loam, clay loam, loam	CL, SC	A-6, A-4		0	0	95-100	80-100
74: Sherless-----	27-39	Cobbly sandy clay loam	CL, GC, SC	A-6, A-7		0	15-25	65-90	65-85
	39-45	Weathered bedrock	---	---		---	---	---	---
	0-4	Cobbly fine sandy loam	SC, SC-SM	A-2-4, A-6		0	20-45	75-100	60-100
	4-28	Very gravelly fine sandy loam, stony sandy loam	GC-GM, GW- GM, GC	A-2-4, A-1-a, A-2-6		0	0-11	50-55	30-55
	28-53	Fine sandy loam	SC, SM	A-4, A-2-4, A-6		0	0	100	100
	53-55	Unweathered bedrock	---	---		---	---	---	---
	0-5	Cobbly fine sandy loam	SM, SC-SM	A-4		0	25-50	75-100	60-100
	5-8	Fine sandy loam, gravelly fine sandy loam	SC-SM, SM	A-4		0	0	80-100	65-100
	8-17	Fine sandy loam, sandy loam, loam	SC-SM, SM, CL-ML	A-4		0	0	95-100	80-100
	17-27	Sandy clay loam, clay loam, loam	CL, SC	A-6, A-4		0	0	95-100	80-100

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number-		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
74:	In				Pct	Pct			
Littlefir-----	0-2	Cobbly fine sandy loam	SC, SC-SM	A-2-4, A-6	0	20-45	85-100	75-100	65-98
	2-9	Fine sandy loam	SC, CL, SC-SM	A-4, A-2-4, A-6	0	0	80-100	75-100	70-100
	9-35	Silty clay, clay	CH, CL	A-7-6	0	0	90-100	85-100	80-100
	35-43	Channery silty clay, channery silty clay, gravelly clay	CH, CL	A-7-6	0	0	75-90	75-90	65-90
	43-50	Weathered bedrock	---	---	---	---	---	---	---
Nashoba-----	0-4	Stony fine sandy loam	SC, SC-SM	A-2-4, A-6	15-25	5-20	80-100	75-100	65-95
	4-28	Very gravelly fine sandy loam, stony sandy loam	GC-GM, GW- GM, GC	A-2-4, A-1-a, A-2-6	0	0-10	50-55	30-55	25-55
	28-53	Fine sandy loam	SC, SM	A-4, A-2-4, A-6	0	0	100	100	85-99
	53-55	Unweathered bedrock	---	---	---	---	---	---	---
75:									
Sherless-----	0-5	Cobbly fine sandy loam	SM, SC-SM	A-4	0	25-50	75-100	60-100	50-98
	5-8	Fine sandy loam, gravelly fine sandy loam	SC-SM, SM	A-4	0	0	80-100	65-100	60-95
	8-17	Fine sandy loam, sandy loam, loam	SC-SM, SM, CL-ML	A-4	0	0	95-100	80-100	70-95
	17-27	Sandy clay loam, clay loam, loam	CL, SC	A-6, A-4	0	0	95-100	80-100	65-99
	27-39	Cobbly sandy clay loam	CL, GC, SC	A-6, A-7	0	15-25	65-90	65-90	55-85
39-45	Weathered bedrock	---	---	---	---	---	---	---	
Nashoba-----	0-4	Cobbly fine sandy loam	SC, SC-SM	A-2-4, A-6	0	20-45	75-100	60-100	55-95
	4-28	Very gravelly fine sandy loam, stony sandy loam	GC-GM, GW- GM, GC	A-2-4, A-1-a, A-2-6	0	0-10	50-55	30-55	25-55
	28-53	Fine sandy loam	SC, SM	A-4, A-2-4, A-6	0	0	100	100	85-99
	53-55	Unweathered bedrock	---	---	---	---	---	---	---

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number-			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
	In				Pct	Pct				
76: Smithton-----	0-3	Fine sandy loam	CL-ML, CL, SM	A-4, A-6	0	0	0	95-100	90-100	80-100
	3-9	Fine sandy loam, loamy sand, loam	SC-SM, SC, SM	A-4, A-2-4, A-6	0	0	0	95-100	90-100	75-98
	9-23	Fine sandy loam, loam, very fine sandy loam, sandy clay loam	SC-SM, CL	A-4, A-6	0	0	0	95-100	90-100	85-100
	23-41	Fine sandy loam, loam, sandy clay loam	SC, CL, SC-SM	A-6, A-2-4, A-7-6	0	0	0	95-100	90-100	75-100
	41-51	Clay loam, sandy clay loam, silty clay loam, sandy loam, fine sandy loam	CL, CL-ML	A-6, A-7-6, A-4	0	0	0	100	100	70-97
	51-80	Clay loam, sandy clay loam, silty clay loam, fine sandy loam	CL, CL-ML	A-6, A-4, A- 7-6	0	0	0	100	100	70-97
77, 78: Speer-----	0-3	Fine sandy loam	SC, SC-SM	A-4, A-6, A- 2-4	0	0	0	85-100	85-100	75-95
	3-13	Fine sandy loam, loam, sandy clay loam	SC, SM	A-6, A-2-4	0	0	0	100	99-100	80-95
	13-34	Loam, sandy clay loam	CL, ML	A-6, A-4	0	0	0	100	100	70-90
	34-80	Loam	CL, ML	A-6, A-4	0	0	0	100	100	80-98
79: Stelltown-----	0-6	Sandy loam	SM	A-2-4	0	0	0	85-100	85-100	65-90
	6-11	Sandy loam, fine sandy loam, loam	SM, SC	A-2-4, A-6	0	0	0	85-100	85-100	70-100
	11-27	Sandy loam, fine sandy loam, loam, sandy clay loam	SC-SM, CL, SM	A-6, A-2-4	0	0	0	90-100	75-100	60-100
	27-42	Sandy loam, clay loam, loam	CL, SC, SC-SM	A-2-4, A-6	0	0	0	75-100	75-100	60-95
	42-80	Sandy clay loam	SC	A-6, A-2-4, A-7-6	0	0	0	100	100	75-95

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
80: Stelltown-----	In				Pct	Pct			
	0-6	Sandy loam	SM	A-2-4					
	6-11	Sandy loam, fine sandy loam, loam	SM, SC	A-2-4, A-6	0	0	0	85-100	85-100
	11-27	Sandy loam, fine sandy loam, loam, sandy clay loam	SC-SM, CL, SM	A-6, A-2-4	0	0	0	90-100	75-100
	27-42	Sandy loam, loam, clay loam	CL, SC, SC-SM	A-2-4, A-6	0	0	0	75-100	75-100
	42-80	Sandy clay loam	SC	A-6, A-2-4, A-7-6	0	0	0	100	100
81: Tiak-----	0-6	Very fine sandy loam	ML	A-4					
	6-19	Silty clay, clay, clay loam, silty clay loam	CH, CL	A-7, A-7-6	0	0	0	80-100	80-100
	19-27	Clay, clay loam, silty clay loam, silty clay	CH, CL	A-7, A-7-6	0	0	0	85-100	85-100
	27-40	Clay, clay loam, silty clay loam, silty clay	CH, CL	A-7	0	0	0	85-100	85-100
	40-80	Clay, clay loam, silty clay, silty clay loam	CH, CL	A-7	0	0	0	85-100	85-100
82, 83: Tiak-----	0-6	Gravelly very fine sandy loam	ML	A-4					
	6-19	Silty clay, clay, clay loam, silty clay loam	CH, CL	A-7, A-7-6	0	0	0	70-100	70-100
	19-27	Clay, clay loam, silty clay loam, silty clay	CH, CL	A-7, A-7-6	0	0	0	85-100	85-100
	27-40	Clay, clay loam, silty clay loam, silty clay	CH, CL	A-7	0	0	0	85-100	85-100
	40-80	Clay, clay loam, silty clay, silty clay loam	CH, CL	A-7	0	0	0	85-100	85-100
84, 85: Tiak-----	0-6	Gravelly very fine sandy loam	ML	A-4					
	6-19	Silty clay, clay, clay loam, silty clay loam	CH, CL	A-7, A-7-6	0	0	0	70-100	70-100
	19-27	Clay, clay loam, silty clay loam, silty clay	CH, CL	A-7, A-7-6	0	0	0	85-100	85-100
	27-40	Clay, clay loam, silty clay loam, silty clay	CH, CL	A-7	0	0	0	85-100	85-100
	40-80	Clay, clay loam, silty clay, silty clay loam	CH, CL	A-7	0	0	0	85-100	85-100

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
84, 85: Antoine-----	In				Pct	Pct				
	0-3	Silt loam	ML, CL-ML	A-4		0	0	100	100	95-10
	3-9	Silt loam	ML, CL-ML	A-4, A-6		0	0	85-100	85-100	80-10
	9-23	Loam, silty clay loam	CL	A-6		0	0	85-100	85-100	80-10
	23-35	Loam, silty clay loam, silt loam	CL	A-6, A-7		0	0	85-100	85-100	80-10
	35-47	Silt loam, silty clay loam	CL	A-7		0	0	85-100	85-100	80-10
86: Toine-----	47-80	Clay loam, loam	CL	A-6		0	0	85-100	85-100	80-10
	0-11	Fine sandy loam	SM, SC	A-4, A-6, A- 2-4		0	0	100	100	85-10
	11-18	Loam, fine sandy loam	CL, ML	A-4, A-6		0	0	100	100	80-95
	18-50	Loam, clay loam, fine sandy loam, sandy clay loam	SC, SC-SM, CL	A-6, A-2-4		0	0	85-100	65-100	55-95
	50-80	Fine sandy loam, sandy clay loam, silt loam	SC, SC-SM, CL	A-2-4, A-6		0	0	85-100	65-100	60-10
87: Toine-----	0-11	Fine sandy loam	SM, SC	A-4, A-2-4, A- 6		0	0	100	100	85-10
	11-18	Loam, fine sandy loam	CL, ML	A-4, A-6		0	0	100	100	80-95
	18-50	Loam, clay loam, fine sandy loam, sandy clay loam	SC, CL, SC-SM	A-6, A-2-4		0	0	85-100	65-100	55-95
	50-80	Fine sandy loam, sandy clay loam, silt loam	SC, SC-SM, CL	A-2-4, A-6		0	0	85-100	65-100	60-10
88: Una-----	0-6	Silty clay loam	CH, CL	A-7-6, A-6		0	0	100	100	95-10
	6-16	Silty clay	CH	A-7-6		0	0	100	100	90-10
	16-44	Silty clay	CH	A-7-6		0	0	100	100	90-10
	44-80	Silty clay, clay, silty clay loam	CH, CL	A-7-6, A-6		0	0	100	100	85-10

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
89:	In				Pct	Pct			
Vaughn-----	0-3	Gravelly loamy sand	SM	A-2-4, A-1-b	0	0	65-85	50-75	40-70
	3-10	Gravelly sandy loam, loamy fine sand	SM, SC	A-2-4, A-6, A-1-b	0	0	65-85	50-85	40-80
		Gravelly loamy fine sand, gravelly fine sandy loam, sandy loam, fine sandy loam							
	10-27	Fine sandy loam, gravelly sandy loam, sandy loam, gravelly loam, loam, gravelly fine sandy loam	SC, SC-SM	A-2-4, A-2-6, A-1-b	0	0	65-90	50-90	45-90
	27-80	Very gravelly sandy loam, very gravelly loamy fine sand, very gravelly loamy sand	GP-GC, GC	A-2-4, A-1-a, A-2-6	0	10-20	40-60	30-60	20-50
90:									
Vaughn-----	0-3	Gravelly sandy loam	SM	A-2-4, A-1-b	0	0	65-85	50-75	40-70
	3-10	Gravelly sandy loam, Fine sandy loam, sandy loam, loamy fine sand, gravelly loamy fine sand, gravelly fine sandy loam	SM, SC	A-2-4, A-6, A-1-b	0	0	65-85	50-85	40-80
	10-27	Fine sandy loam, gravelly fine sandy loam, gravelly sandy loam, sandy loam, gravelly loam, loam	SC, SC-SM	A-2-4, A-2-6, A-1-b	0	0	65-90	50-90	45-90
	27-80	Very gravelly sandy loam, very gravelly loamy fine sand, very gravelly loamy sand	GP-GC, GC	A-2-4, A-1-a, A-2-6	0	10-20	40-60	30-60	20-50

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass- sieve number			
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	
90: Pikecreek-----	In					Pct	Pct			
	0-4	Very gravelly loamy sand	SM, GM	A-1, A-2		0	3-23	48-84	46-83	31-65
	4-33	Extremely gravelly loamy sand, very gravelly loamy sand, very cobbly loamy sand, very cobbly coarse sand, extremely gravelly coarse sand, very gravelly coarse sand, very gravelly loamy coarse sand, extremely gravelly loamy coarse sand, very cobbly loamy coarse sand	GP-GM, GM	A-1, A-2		0	3-30	15-52	12-51	9-43
	33-80	Extremely cobbly coarse sand, very gravelly loamy sand, very gravelly coarse sand, very cobbly loamy sand, very cobbly coarse sand, extremely gravelly coarse sand, very gravelly loamy coarse sand, extremely gravelly loamy coarse sand, very cobbly loamy coarse sand, extremely gravelly loamy sand, extremely cobbly loamy sand, extremely cobbly loamy coarse sand	GP-GM	A-1, A-2		0	7-38	14-61	10-59	5-33
91: Water.										
92: Wetsaw-----	0-2	Fine sandy loam	SC, SM, SC-SM	A-2-4, A-4		0				
	2-6	Fine sandy loam, loam	SC-SM, SC, SM	A-4, A-2-4		0				
	6-18	Loam, clay loam, sandy clay loam	CL, SM	A-6, A-4		0				
	18-36	Clay loam, gravelly sandy clay loam	CL, SC	A-7-6, A-6		0				
	36-80	Silty clay loam, silty clay	CL, CH	A-7-6, A-6		0				

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number-				
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40		
93:	In				Pct	Pct					
Woodall-----	0-4	Fine sandy loam	CL-ML, ML	A-4		0	0	95-100	95-100	85-95	
	4-9	Fine sandy loam, sandy loam, loam	SM, CL-ML, ML, SC-SM	A-4, A-2		0	0	95-100	95-100	60-95	
	9-24	Fine sandy loam, loam, very fine sandy loam	SC-SM, ML, SM, CL-ML	A-4, A-2		0	0	95-100	95-100	60-95	
	24-38	Fine sandy loam, loam, sandy clay loam	SC-SM, CL, CL-ML, SC	A-4, A-2, A-6		0	0	95-100	95-100	60-95	
	38-61	Fine sandy loam, loam	SM	A-4		0	0	100	100	86-99	
94:											
Woodall-----	0-4	Fine sandy loam	ML, CL-ML	A-4		0	0	95-100	95-100	85-95	
	4-9	Fine sandy loam, sandy loam, loam	ML, CL-ML, SC-SM, SM	A-4, A-2		0	0	95-100	95-100	60-95	
	9-24	Fine sandy loam, loam, very fine sandy loam	SM, SC-SM	A-4, A-2		0	0	95-100	95-100	60-95	
	24-38	Fine sandy loam, loam, sandy clay loam	SM, CL, CL- ML, SC	A-4, A-2, A-6		0	0	95-100	95-100	60-95	
	38-61	Fine sandy loam, loam	SM	A-4		0	0	100	100	86-99	
95, 96:											
Yanush-----	0-5	Very gravelly silt loam	ML, CL, GC, GM	A-4, A-6		0	5-10	35-55	25-55	20-50	
	5-12	Very gravelly silt loam	ML, GM, CL	A-4, A-6		0	5-10	35-55	25-55	20-55	
	12-19	Very gravelly silt loam	ML, CL, GM	A-4, A-6		0	5-10	35-55	25-55	20-55	
	19-33	Very gravelly silty clay loam	CL, CH, GM, ML	A-7, A-4		0	5-10	35-55	25-55	25-55	
	33-80	Extremely gravelly silty clay loam, very gravelly silty clay loam	CL, GC	A-7, A-2, A-6		0	5-10	20-55	7-55	6-55	
97:											
Yanush-----	0-5	Very cobbly silt loam, very gravelly silt loam	ML	A-4		0	45-75	75-85	50-85	45-85	
	5-12	Very gravelly silt loam	ML, GM, CL	A-4, A-6		0	5-10	35-55	25-55	20-55	
	12-19	Very gravelly silt loam	ML, CL, GM	A-4, A-6		0	5-10	35-55	25-55	20-55	
	19-33	Very gravelly silty clay loam	CL, CH, GM, ML	A-7, A-4		0	5-10	35-55	25-55	25-55	
	33-80	Extremely gravelly silty clay loam, very gravelly silty clay loam	CL, GC	A-7, A-2, A-6		0	5-10	20-55	7-55	6-55	

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
97: Avant-----	In				Pct	Pct			
	0-4	Very cobbly silt loam	SC, SM, ML	A-4, A-2, A-1-b	0	28-49	65-82	37-69	31-69
	4-10	Very gravelly silt loam, very gravelly loam, very cobbly silt loam	GC, GM	A-2-4, A-6, A-1-b	0	14-49	51-66	26-58	22-58
	10-16	Very gravelly silt loam, very gravelly loam, very cobbly silt loam	GC, GC-GM	A-2-6, A-1-b, A-6	0	14-49	56-74	22-57	19-57
	16-36	Very gravelly silty clay loam, very cobbly silty clay loam extremely cobbly silty clay loam	GC, GP-GC	A-2-6, A-2-4, A-7-6	0	7-52	38-60	8-51	6-51
	36-40	Unweathered bedrock	---	---	---	---	---	---	---
	0-3	Very cobbly silt loam, cobbly silt loam	ML, CL-ML	A-4	0	25-45	50-100	45-100	40-98
	3-6	Gravelly silt loam	ML, CL, SC, SC-SM	A-4	0	0	55-80	55-80	50-80
	6-13	Silty clay loam, silty clay, channery silty clay loam	CL, CH	A-7, A-6	0	0-20	75-100	75-100	65-100
	13-31	Silty clay, gravelly clay	CH, CL	A-7	0	0-20	70-100	70-100	65-100
98: Yanush-----	31-37	Channery silty clay, channery clay	CH, CL	A-7	0	10-25	70-85	65-85	60-85
	37-40	Weathered bedrock	---	---	---	---	---	---	---
	0-5	Cobbly silt loam	ML, CL, GM	A-4, A-6	0	15-50	65-90	65-90	55-90
	5-12	Very gravelly silt loam	ML, GM, CL	A-4, A-6	0	5-10	35-55	25-55	20-55
	12-19	Very gravelly silt loam	ML, CL, GM	A-4, A-6	0	5-10	35-55	25-55	20-55
	19-33	Very gravelly silty clay loam	CL, CH, GM, ML	A-7, A-4	0	5-10	35-55	25-55	25-55
	33-80	Extremely gravelly silty clay loam, very gravelly silty clay loam	CL, GC	A-7, A-2, A-6	0	5-10	20-55	7-55	6-55

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
98:	In				Pct	Pct			
Avant-----	0-4	Very cobbly silt loam	SC, ML, SM	A-4, A-1-b, A-2	0	28-49	65-82	37-69	31-69
	4-10	Very gravelly silt loam, very gravelly loam, very cobbly silt loam	GC, GM	A-2-4, A-1- b, A-6	0	14-49	51-66	26-58	22-58
	10-16	Very gravelly silt loam, very gravelly loam, very cobbly silt loam	GC, GC-GM	A-2-6, A-1-b, A-6	0	14-49	56-74	22-57	19-57
	16-36	Very gravelly silty clay loam, very cobbly silty clay loam, extremely cobbly silty clay loam	GC, GP-GC	A-2-6, A-2-4, A-7-6	0	7-52	38-60	8-51	6-51
	36-40	Unweathered bedrock	---	---	---	---	---	---	---
Bengal-----	0-3	Very cobbly silt loam	ML, CL-ML	A-4	0	35-60	40-75	40-75	35-75
	3-6	Gravelly silt loam	ML, CL, SC, SC-SM	A-4	0	0	55-80	55-80	50-80
	6-13	Silty clay loam, silty clay, channery silty clay loam	CL, CH	A-7, A-6	0	0-20	75-100	75-100	65-10
	13-31	Silty clay, gravelly clay	CH, CL	A-7	0	0-20	70-100	70-100	65-10
	31-37	Channery silty clay, channery clay	CH, CL	A-7	0	10-25	70-85	65-85	60-85
	37-40	Weathered bedrock	---	---	---	---	---	---	---
99:									
Yanush-----	0-5	Very gravelly silt loam	ML, CL, GC, GM	A-4, A-6	0	5-10	35-55	25-55	20-50
	5-12	Very gravelly silt loam	ML, GM, CL	A-4, A-6	0	5-10	35-55	25-55	20-55
	12-19	Very gravelly silt loam	ML, CL, GM	A-4, A-6	0	5-10	35-55	25-55	20-55
	19-33	Very gravelly silty clay loam	CL, CH, GM, ML	A-7, A-4	0	5-10	35-55	25-55	25-55
	33-80	Extremely gravelly silty clay loam, very gravelly silty clay loam	CL, GC	A-7, A-2, A-6	0	5-10	20-55	7-55	6-55

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
99: Bigfork-----	In				Pct	Pct			
	0-3	Very cobbly loam		A-4					
	3-7	Very cobbly loam, very gravelly loam, very cobbly silty clay loam	CL, GC, SC, CL-ML	A-4, A-2, A-6	5-20	45-75	100	100	85-95
	7-25	Very cobbly silty clay loam, very gravelly silty clay loam, very gravelly clay loam, very cobbly clay loam	CL, GC, SC	A-7, A-2, A-6	10-20	20-35	55-90	30-80	30-80
	25-40	Unweathered bedrock	---	---	---	---	---	---	---
100: Yanush-----	0-5	Very stony silt loam	ML	A-4	20-35	15-20	60-80	160-80	60-80
	5-12	Very gravelly silt loam	ML, GM, CL	A-4, A-6	0	5-10	35-55	25-55	20-55
	12-19	Very gravelly silt loam	ML, CL, GM	A-4, A-6	0	5-10	35-55	25-55	20-55
	19-33	Very gravelly silty clay loam	CL, CH, GM, ML	A-7, A-4	0	5-10	35-55	25-55	25-55
	33-80	Extremely gravelly silty clay loam, very gravelly silty clay loam	CL, GC	A-7, A-2, A-6	0	5-10	20-55	7-55	6-55
Bigfork-----	0-3	Stony loam		A-4					
	3-7	Very cobbly loam, very gravelly loam, very cobbly silty clay loam	CL, GC, SC, CL-ML	A-4, A-2, A-6	15-25	10-30	100	100	85-95
	7-25	Very cobbly silty clay loam, very gravelly silty clay loam, very gravelly clay loam, very cobbly clay loam	CL, GC, SC	A-7, A-2, A-6	10-20	20-35	55-90	30-80	30-80
	25-40	Unweathered bedrock	---	---	---	---	---	---	---

Table 16.--Engineering Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage pass sieve number--		
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40
101: Zafra-----	In				Pct	Pct			
	0-2	Very stony fine sandy loam		A-4	26-58	6-14	55-80	40-80	35-80
	2-4	Gravelly fine sandy loam	SM, SC-SM	A-4, A-1, A-2	0	7-19	65-85	60-85	50-85
	4-9	Gravelly fine sandy loam, loam	SC, CL, SC- SM, SM	A-4, A-2	0	0-3	75-95	50-95	40-90
	9-14	Very gravelly loam, gravelly clay loam, very gravelly sandy clay loam	GM, GC, GC- GM, CL-ML	A-4, A-1, A2, A-6	0	0-8	55-80	35-80	25-75
	14-26	Very gravelly clay loam, gravelly loam	CL, SC, SC-SM	A-4, A-2	0	0-3	45-75	25-65	15-65
	26-38	Very gravelly clay loam, gravelly loam, gravelly clay loam, very gravelly sandy clay loam	CL, GC, GC-GM	A-4, A-2, A-6	0	0-5	45-75	25-65	20-65
	38-42	Weathered bedrock	---	---	---	---	---	---	---
	42-43	Unweathered bedrock	---	---	---	---	---	---	---
Carnasaw-----	0-3	Stony fine sandy loam	SC-SM, SC, SM						
	3-10	Cobbly fine sandy loam	SC-SM, SC, SM	A-4, A-6	5-20 0	5-15 5-25	90-95 70-85	80-90 65-85	70-90 55-80
	10-40	Silty clay	CH, CL	A-7	0	0-10	85-95	75-95	65-95
	40-58	Silty clay	CH, CL	A-7	0	0-10	90-95	80-90	70-90
Clebit-----	58-60	Weathered bedrock	---	---	---	---	---	---	---
	0-4	Extremely stony fine sandy loam	GM, GC-GM	A-2, A-4	35-40	30-35	60-85	25-70	20-65
	4-12	Very gravelly loam, very gravelly fine sandy loam	GM, ML, GC, GC-GM	A-4, A-1, A- 2, A-6	0	5-15	30-60	25-60	20-55
	12-16	Extremely gravelly fine sandy loam, very gravelly fine sandy loam	GM	A-2	0	5-20	25-60	20-60	20-55
	16-17	Unweathered bedrock	---	---	---	---	---	---	---

Table 17.--Physical Soil Properties

[Entries under "Erosion factors--T" apply to the entire profile. Entries in the "Silt" column are representative of the "Sand" and "Clay" columns are low, representative, and high values. Entries under "Wind erodibility g erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated.]

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Erosion	
									Organic matter	Kw
	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
1: Antoine-----	0-3	25-38-40	51	8-11-18	1.20-1.40	4.23-14.11	0.15-0.20	0.0-2.9	1.0-3.0	.37
	3-9	25-32-40	50	12-18-25	1.35-1.60	4.23-14.11	0.15-0.20	0.0-2.9	1.0-3.0	.37
	9-23	15-29-40	49	20-22-35	1.35-1.55	1.41-4.23	0.15-0.20	3.0-5.9	1.0-1.5	.32
	23-35	15-27-40	47	20-27-35	1.15-1.50	0.42-1.41	0.14-0.20	6.0-8.9	0.5-1.0	.32
	35-47	15-24-30	52	20-24-35	1.20-1.40	0.42-1.41	0.14-0.20	6.0-8.9	0.0-0.5	.32
	47-80	20-24-40	49	20-27-35	1.20-1.40	0.42-1.41	0.14-0.20	6.0-8.9	0.0-0.5	.32
2: Avilla-----	0-4	55-69-75	16	10-15-20	1.30-1.60	4.23-14.11	0.10-0.18	0.0-2.9	0.5-2.0	.24
	4-9	30-43-60	40	8-18-27	1.30-1.50	4.23-42.34	0.10-0.18	0.0-2.9	0.5-2.0	.24
	9-16	30-37-60	41	7-22-27	1.35-1.50	4.23-14.11	0.14-0.18	0.0-2.9	0.5-1.0	.28
	16-34	30-35-60	33	7-32-39	1.35-1.50	4.23-14.11	0.11-0.18	0.0-2.9	0.5-1.0	.28
	34-44	30-35-60	33	7-32-39	1.35-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-1.0	.24
	44-61	30-35-60	32	7-33-39	1.35-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-1.0	.24
3: Avilla-----	0-4	60-69-75	16	8-15-20	1.30-1.60	4.23-14.11	0.10-0.18	0.0-2.9	0.5-2.0	.24
	4-9	30-43-60	40	8-18-27	1.30-1.50	4.23-42.34	0.10-0.18	0.0-2.9	0.5-2.0	.24
	9-16	30-37-60	41	7-22-27	1.35-1.50	4.23-14.11	0.14-0.18	0.0-2.9	0.5-1.0	.28
	16-34	30-35-60	33	7-32-39	1.35-1.50	4.23-14.11	0.11-0.18	0.0-2.9	0.5-1.0	.28
	34-44	30-35-60	33	7-32-39	1.35-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-1.0	.24
	44-61	30-35-60	32	7-33-39	1.35-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-1.0	.24
4: Avilla-----	0-4	60-69-75	16	10-15-20	1.30-1.60	4.23-14.11	0.10-0.18	0.0-2.9	0.5-2.0	.24
	4-9	30-43-60	40	8-18-27	1.30-1.50	4.23-42.34	0.10-0.18	0.0-2.9	0.5-2.0	.24
	9-16	30-37-60	41	7-22-27	1.35-1.50	4.23-14.11	0.14-0.18	0.0-2.9	0.5-1.0	.28
	16-34	30-35-60	33	7-32-39	1.35-1.50	4.23-14.11	0.11-0.18	0.0-2.9	0.5-1.0	.28
	34-44	30-35-60	33	7-32-39	1.35-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-1.0	.24
	44-61	30-35-60	32	7-33-39	1.35-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-1.0	.24
5, 6: Bengal-----	0-3	15-30-35	55	12-15-22	1.30-1.60	4.23-14.11	0.11-0.16	0.0-2.9	0.5-2.0	.28
	3-6	15-30-35	55	12-15-22	1.30-1.60	4.23-14.11	0.11-0.16	0.0-2.9	0.5-2.0	.28
	6-13	5-18-20	46	27-36-40	1.35-1.55	1.41-14.11	0.13-0.17	3.0-5.9	0.5-1.0	.28
	13-31	2- 5-15	45	40-50-60	1.25-1.50	0.42-1.41	0.13-0.18	6.0-8.9	0.0-0.5	.32
	31-37	2- 5-15	45	40-50-60	1.25-1.50	0.42-1.41	0.13-0.18	6.0-8.9	0.0-0.5	.32
	37-40	---	--	---	---	0.00-1.41	---	---	---	---

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
5, 6: Bismarck-----	0-6	15-30-35	56	12-14-20	1.30-1.50	4.23-14.11	0.11-0.17	0.0-2.9	0.5-2.0	.32
	6-16	15-30-45	56	12-14-20	1.30-1.55	4.23-14.11	0.07-0.17	0.0-2.9	0.5-2.0	.28
	16-20	---	--	---	---	0.07-4.23	0.00-0.00	---	---	---
Yanush-----	0-5	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	5-12	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	12-19	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	19-33	5-16-20	51	27-34-40	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	33-80	5-16-20	51	27-34-40	1.45-1.70	4.23-14.11	0.05-0.11	3.0-5.9	0.0-0.5	.28
7: Bengal-----	0-3	35-44-50	41	10-15-20	1.20-1.40	4.23-14.11	0.13-0.20	0.0-2.9	0.5-2.0	.24
	3-6	15-30-40	55	12-15-22	1.30-1.60	4.23-14.11	0.11-0.16	0.0-2.9	0.5-2.0	.28
	6-13	5-18-20	46	27-36-40	1.35-1.55	1.41-14.11	0.13-0.17	3.0-5.9	0.5-1.0	.28
	13-31	2- 5-15	45	40-50-60	1.25-1.50	0.42-1.41	0.13-0.18	6.0-8.9	0.0-0.5	.32
	31-37	2- 5-15	45	40-50-60	1.25-1.50	0.42-1.41	0.13-0.18	6.0-8.9	0.0-0.5	.32
	37-40	---	--	---	---	0.00-1.41	---	---	---	---
Bismarck-----	0-6	15-30-35	56	12-14-20	1.30-1.50	4.23-14.11	0.11-0.17	0.0-2.9	0.5-2.0	.32
	6-16	15-30-45	56	12-14-20	1.30-1.55	4.23-14.11	0.07-0.17	0.0-2.9	0.5-2.0	.28
	16-20	---	--	---	---	0.07-4.23	0.00-0.00	---	---	---
Bigfork-----	0-3	35-42-50	38	15-20-26	1.45-1.70	4.23-14.11	0.02-0.11	0.0-2.9	0.5-2.0	.15
	3-7	10-38-45	40	15-22-28	1.45-1.70	4.23-14.11	0.02-0.11	3.0-5.9	0.0-0.5	.15
	7-25	10-18-40	51	27-31-35	1.45-1.70	4.23-14.11	0.05-0.14	3.0-5.9	0.0-0.5	.15
	25-40	---	--	---	1.85-2.35	0.00-0.07	---	---	---	---
8: Bigfork-----	0-3	35-42-50	38	15-20-26	1.30-1.55	4.23-14.11	0.02-0.12	0.0-2.9	0.5-2.0	.15
	3-7	10-38-45	40	15-22-28	1.45-1.70	4.23-14.11	0.02-0.11	3.0-5.9	0.0-0.5	.15
	7-25	10-18-40	51	27-31-35	1.45-1.70	4.23-14.11	0.05-0.14	3.0-5.9	0.0-0.5	.15
	25-40	---	--	---	1.85-2.35	0.00-0.07	---	---	---	---
Rock outcrop.										
9: Bigfork-----	0-3	35-42-50	38	15-20-26	1.20-1.40	4.23-14.11	0.02-0.11	3.0-5.9	0.5-2.0	.15
	3-7	10-38-45	40	15-22-28	1.45-1.70	4.23-14.11	0.02-0.11	3.0-5.9	0.0-0.5	.15
	7-25	10-18-40	51	27-31-35	1.45-1.70	4.23-14.11	0.05-0.14	3.0-5.9	0.0-0.5	.15
	25-40	---	--	---	1.85-2.35	0.00-0.07	---	---	---	---
Yanush-----	0-5	15-26-35	59	10-15-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	5-12	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	12-19	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	19-33	5-16-20	51	27-34-40	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	33-80	5-16-20	51	27-34-40	1.45-1.70	4.23-14.11	0.05-0.11	3.0-5.9	0.0-0.5	.28

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
9: Rock outcrop.	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
										Kw
10, 11: Billstown-----	0-7	10-22-30	54	10-24-27	1.10-1.30	0.00-0.42	0.15-0.20	6.0-8.9	1.0-3.0	.37
	7-13	10-25-30	63	8-11-20	1.50-1.70	0.00-0.42	0.15-0.20	6.0-8.9	0.5-2.0	.37
	13-22	0- 6-10	24	50-70-75	1.10-1.20	0.00-0.42	0.15-0.20	6.0-8.9	0.5-1.0	.37
	22-32	0- 7-10	20	50-73-75	1.00-1.20	0.00-0.42	0.15-0.20	6.0-8.9	0.2-0.8	.37
	32-49	0- 9-10	31	50-61-75	1.10-1.30	0.00-0.42	0.15-0.20	6.0-8.9	0.2-0.8	.37
	49-64	0- 5-10	38	50-58-75	1.20-1.40	0.00-0.42	0.15-0.20	6.0-8.9	0.2-0.8	.37
	64-80	0- 6-10	43	40-52-60	1.20-1.40	0.00-0.42	0.15-0.20	6.0-8.9	0.2-0.8	.37
12: Billstown-----	0-7	10-22-30	54	10-24-27	1.10-1.30	0.00-0.42	0.15-0.20	6.0-8.9	1.0-3.0	.37
	7-13	10-25-30	63	8-11-20	1.50-1.70	0.00-0.42	0.15-0.20	6.0-8.9	0.5-2.0	.37
	13-22	0- 6-10	24	50-70-75	1.10-1.20	0.00-0.42	0.15-0.20	6.0-8.9	0.5-1.0	.37
	22-32	0- 7-10	20	50-73-75	1.00-1.20	0.00-0.42	0.15-0.20	6.0-8.9	0.2-0.8	.37
	32-49	0- 9-10	31	50-61-75	1.10-1.30	0.00-0.42	0.15-0.20	6.0-8.9	0.2-0.8	.37
	49-64	0- 5-10	38	50-58-75	1.20-1.40	0.00-0.42	0.15-0.20	6.0-8.9	0.2-0.8	.37
	64-80	0- 6-10	43	40-52-60	1.20-1.40	0.00-0.42	0.15-0.20	6.0-8.9	0.2-0.8	.37
Tiak-----	0-6	55-63-70	23	10-14-18	1.30-1.50	4.23-14.11	0.09-0.12	0.0-2.9	1.0-3.0	.28
	6-19	5- 6-30	47	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	3.0-5.9	0.5-1.0	.32
	19-27	5-23-30	29	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	6.0-8.9	0.2-0.8	.32
	27-40	5-23-30	29	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	6.0-8.9	0.0-0.5	.32
	40-80	5-23-30	29	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	6.0-8.9	0.0-0.0	.32
13: Bonnerdale-----	0-3	50-70-70	22	7- 8-20	1.50-1.60	14.11-42.34	0.11-0.13	0.0-2.9	1.0-4.0	.28
	3-13	50-68-70	21	7-12-20	1.50-1.55	14.11-42.34	0.11-0.13	0.0-2.9	0.5-1.0	.28
	13-24	50-70-70	16	7-14-20	1.45-1.55	14.11-42.34	0.11-0.18	0.0-2.9	0.5-1.0	.28
	24-35	50-64-70	23	7-14-20	1.40-1.50	4.23-14.11	0.12-0.18	0.0-2.9	0.0-0.5	.28
	35-43	50-55-70	28	7-17-20	1.25-1.50	4.23-14.11	0.11-0.18	0.0-2.9	0.0-0.5	.32
	43-54	50-55-70	29	7-16-20	1.25-1.50	4.23-14.11	0.11-0.18	0.0-2.9	0.0-0.5	.32
	54-60	---	--	---	---	1.41-14.11	---	---	---	---
14: Carnasaw-----	0-3	55-68-75	14	7-18-20	1.30-1.60	4.23-14.11	0.10-0.16	0.0-2.9	0.5-2.0	.32
	3-10	55-68-75	14	7-18-20	1.45-1.70	1.41-4.23	0.10-0.19	6.0-8.9	0.0-0.5	.37
	10-40	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.10-0.15	6.0-8.9	0.0-0.5	.24
	40-58	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.08-0.12	6.0-8.9	0.0-0.5	.17
	58-60	---	--	---	1.85-2.00	0.00-1.41	---	---	---	---

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
In	Pct	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
14: Pirum-----	0-3	35-43-50	38	10-18-27	1.30-1.60	4.23-14.11	0.08-0.12	0.0-2.9	0.5-2.0	.20
	3-7	45-67-70	14	10-18-20	1.30-1.60	4.23-14.11	0.08-0.17	0.0-2.9	0.5-1.0	.24
	7-16	35-38-50	36	18-26-27	1.25-1.60	4.23-14.11	0.11-0.18	0.0-2.9	0.2-0.5	.32
	16-26	45-55-65	17	20-28-35	1.40-1.60	4.23-14.11	0.11-0.18	3.0-5.9	0.0-0.2	.32
	26-40	45-55-65	17	20-28-35	1.40-1.60	4.23-14.11	0.11-0.18	3.0-5.9	0.0-0.2	.32
	40-42	---	--	---	---	1.41-14.11	---	---	---	---
15: Carnasaw-----	0-3	55-66-75	17	7-18-20	1.30-1.60	4.23-14.11	0.10-0.16	0.0-2.9	0.5-2.0	.24
	3-10	55-68-75	14	7-18-20	1.45-1.70	1.41-4.23	0.10-0.19	6.0-8.9	0.0-0.5	.37
	10-40	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.10-0.15	6.0-8.9	0.0-0.5	.24
	40-58	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.08-0.12	6.0-8.9	0.0-0.5	.17
	58-60	---	--	---	1.85-2.00	0.00-1.41	---	---	---	---
Sherless-----	0-5	55-68-75	21	7-12-18	1.20-1.40	14.11-42.34	0.11-0.13	0.0-2.9	0.5-2.0	.20
	5-8	55-68-75	21	8-12-15	1.50-1.55	14.11-42.34	0.11-0.13	0.0-2.9	0.5-1.0	.28
	8-17	40-70-75	16	10-14-18	1.45-1.55	14.11-42.34	0.11-0.18	0.0-2.9	0.5-1.0	.28
	17-27	40-60-65	18	20-22-35	1.40-1.50	4.23-14.11	0.12-0.18	0.0-2.9	0.0-0.5	.28
	27-39	50-55-65	18	20-28-35	1.25-1.50	4.23-14.11	0.11-0.18	6.0-8.9	0.0-0.5	.32
	39-45	---	--	---	---	1.41-14.11	0.00-0.00	---	---	---
16: Carnasaw-----	0-3	55-66-75	17	7-18-20	1.30-1.60	4.23-14.11	0.10-0.16	0.0-2.9	0.5-2.0	.32
	3-10	55-68-75	14	7-18-20	1.45-1.70	1.41-4.23	0.10-0.19	6.0-8.9	0.0-0.5	.37
	10-40	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.10-0.15	6.0-8.9	0.0-0.5	.24
	40-58	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.08-0.12	6.0-8.9	0.0-0.5	.17
	58-60	---	--	---	1.85-2.00	0.00-1.41	---	---	---	---
Sherless-----	0-5	55-68-75	21	7-12-18	1.20-1.40	14.11-42.34	0.11-0.13	0.0-2.9	0.5-2.0	.20
	5-8	55-68-75	21	8-12-15	1.50-1.55	14.11-42.34	0.11-0.13	0.0-2.9	0.5-1.0	.28
	8-17	40-70-75	16	10-14-18	1.45-1.55	14.11-42.34	0.11-0.18	0.0-2.9	0.5-1.0	.28
	17-27	40-60-65	18	20-22-35	1.40-1.50	4.23-14.11	0.12-0.18	0.0-2.9	0.0-0.5	.28
	27-39	50-55-65	18	20-28-35	1.25-1.50	4.23-14.11	0.11-0.18	6.0-8.9	0.0-0.5	.32
	39-45	---	--	---	---	1.41-14.11	0.00-0.00	---	---	---
17: Carnasaw-----	0-3	55-66-75	17	7-18-20	1.30-1.60	4.23-14.11	0.10-0.16	0.0-2.9	0.5-2.0	.24
	3-10	55-68-75	14	7-18-20	1.45-1.70	1.41-4.23	0.10-0.19	6.0-8.9	0.0-0.5	.37
	10-40	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.10-0.15	6.0-8.9	0.0-0.5	.24
	40-58	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.08-0.12	6.0-8.9	0.0-0.5	.17
	58-60	---	--	---	1.85-2.00	0.00-1.41	---	---	---	---

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
17: Sherwood	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
										Kw
Zafra	0-4	55-63-70	23	7-14-20	1.30-1.60	4.23-14.11	0.10-0.16	0.0-2.9	0.5-2.0	.32
	4-13	55-63-70	23	7-14-20	1.30-1.60	4.23-14.11	0.10-0.16	0.0-2.9	0.2-1.2	.32
	13-42	35-56-60	18	18-26-35	1.40-1.70	4.23-14.11	0.11-0.18	0.0-2.9	0.0-0.5	.32
	42-45	35-38-60	36	18-26-35	1.40-1.70	4.23-14.11	0.09-0.15	0.0-2.9	0.0-0.5	.32
	45-50	---	--	---	1.85-2.00	4.23-14.11	---	---	---	---
	50-60	---	--	---	---	1.41-14.11	---	---	---	---
	0-2	60-70-75	16	7-13-18	1.20-1.40	14.11-42.34	0.03-0.12	0.0-2.9	0.5-2.0	.24
	2-4	60-67-75	20	7-13-20	1.30-1.60	14.11-42.34	0.03-0.12	0.0-2.9	0.5-1.5	.24
	4-9	45-68-75	14	7-18-20	1.40-1.65	4.23-14.11	0.10-0.18	0.0-2.9	0.0-0.5	.32
	9-14	30-38-60	36	7-25-27	1.40-1.70	4.23-14.11	0.02-0.13	0.0-2.9	0.0-0.5	.24
18: Carnasaw	14-26	30-39-60	27	7-34-40	1.40-1.65	4.23-14.11	0.10-0.18	0.0-2.9	0.0-0.5	.32
	26-38	30-36-60	31	10-34-40	1.40-1.70	4.23-14.11	0.02-0.13	0.0-2.9	0.0-0.5	.24
	38-42	---	--	---	---	1.41-14.11	---	---	---	---
	42-43	---	--	---	---	1.41-14.11	---	---	---	---
	0-3	55-66-75	21	7-14-20	1.30-1.60	14.11-42.34	0.10-0.16	0.0-2.9	0.5-2.0	.17
	3-10	55-68-75	14	7-18-20	1.45-1.70	1.41-4.23	0.10-0.19	6.0-8.9	0.0-0.5	.37
	10-40	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.10-0.15	6.0-8.9	0.0-0.5	.24
	40-58	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.08-0.12	6.0-8.9	0.0-0.5	.17
	58-60	---	--	---	1.85-2.00	0.00-1.41	---	---	---	---
	0-2	60-70-75	16	7-13-18	1.30-1.60	14.11-42.34	0.03-0.12	0.0-2.9	1.0-2.0	.24
Zafra	2-4	60-67-75	20	7-13-20	1.30-1.60	14.11-42.34	0.03-0.12	0.0-2.9	0.5-1.5	.24
	4-9	45-68-75	14	7-18-20	1.40-1.65	4.23-14.11	0.10-0.18	0.0-2.9	0.0-0.5	.32
	9-14	30-38-60	36	7-25-27	1.40-1.70	4.23-14.11	0.02-0.13	0.0-2.9	0.0-0.5	.24
	14-26	30-39-60	27	7-34-40	1.40-1.65	4.23-14.11	0.10-0.18	0.0-2.9	0.0-0.5	.32
	26-38	30-36-60	31	10-34-40	1.40-1.70	4.23-14.11	0.02-0.13	0.0-2.9	0.0-0.5	.24
	38-42	---	--	---	---	1.41-14.11	---	---	---	---
	42-43	---	--	---	---	1.41-14.11	---	---	---	---
	0-4	55-69-70	16	10-15-20	1.30-1.60	14.11-42.34	0.04-0.08	0.0-2.9	0.5-1.0	.15
	4-12	40-44-70	41	10-15-20	1.30-1.60	14.11-42.34	0.04-0.10	0.0-2.9	0.0-0.5	.15
	12-16	55-70-75	16	7-14-20	1.30-1.60	14.11-42.34	0.04-0.10	0.0-2.9	0.0-0.5	.15
19: Ceda	16-17	---	--	---	---	1.41-14.11	---	---	---	---
	0-12	60-70-75	16	10-14-18	1.40-1.60	42.34-141.14	0.05-0.12	0.0-2.9	1.0-2.0	.24
	12-22	60-70-75	16	7-14-20	1.40-1.60	42.34-141.14	0.05-0.12	0.0-2.9	0.5-1.0	.17
	22-55	60-70-75	16	10-14-18	1.30-1.60	42.34-141.14	0.05-0.12	0.0-2.9	0.5-1.0	.17
	55-80	60-73-75	14	7-14-20	1.40-1.70	42.34-141.14	0.02-0.16	0.0-2.9	0.5-1.0	.28
	0-2	60-70-75	16	7-13-18	1.20-1.40	14.11-42.34	0.03-0.12	0.0-2.9	0.5-2.0	.24
	2-4	60-67-75	20	7-13-20	1.30-1.60	14.11-42.34	0.03-0.12	0.0-2.9	0.5-1.5	.24
	4-9	45-68-75	14	7-18-20	1.40-1.65	4.23-14.11	0.10-0.18	0.0-2.9	0.0-0.5	.32
	9-14	30-38-60	36	7-25-27	1.40-1.70	4.23-14.11	0.02-0.13	0.0-2.9	0.0-0.5	.24
	14-26	30-39-60	27	7-34-40	1.40-1.65	4.23-14.11	0.10-0.18	0.0-2.9	0.0-0.5	.32

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
In	Pct	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	Kw
20:										
Ceda-----	0-12	60-70-75	16	10-14-18	1.40-1.60	42.34-141.14	0.05-0.12	0.0-2.9	1.0-2.0	.24
	12-22	60-70-75	16	7-14-20	1.40-1.60	42.34-141.14	0.05-0.12	0.0-2.9	0.5-1.0	.17
	22-55	60-70-75	16	10-14-18	1.30-1.60	42.34-141.14	0.05-0.12	0.0-2.9	0.5-1.0	.17
	55-80	60-73-75	14	7-14-20	1.40-1.70	42.34-141.14	0.02-0.16	0.0-2.9	0.5-1.0	.28
21:										
Ciebit-----	0-4	55-69-70	16	10-15-20	1.30-1.60	14.11-42.34	0.05-0.10	0.0-2.9	0.5-1.0	.15
	4-12	40-44-70	41	10-15-20	1.30-1.60	14.11-42.34	0.04-0.10	0.0-2.9	0.0-0.5	.15
	12-16	55-70-75	16	7-14-20	1.30-1.60	14.11-42.34	0.04-0.10	0.0-2.9	0.0-0.5	.15
	16-17	---	--	---	---	1.41-14.11	---	---	---	---
Carnasaw-----	0-3	55-69-75	14	7-18-20	1.30-1.60	4.23-14.11	0.06-0.12	0.0-2.9	0.5-2.0	.24
	3-10	55-68-75	14	7-18-20	1.45-1.70	1.41-4.23	0.10-0.19	6.0-8.9	0.0-0.5	.37
	10-40	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.10-0.15	6.0-8.9	0.0-0.5	.24
	40-58	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.08-0.12	6.0-8.9	0.0-0.5	.17
	58-60	---	--	---	1.85-2.00	0.00-1.41	---	---	---	---
Pirum-----	0-3	30-40-50	38	18-22-27	1.30-1.60	4.23-14.11	0.05-0.12	0.0-2.9	0.5-2.0	.17
	3-7	45-67-70	14	10-18-20	1.30-1.60	4.23-14.11	0.08-0.17	0.0-2.9	0.5-1.0	.24
	7-16	35-38-50	36	18-26-27	1.25-1.60	4.23-14.11	0.11-0.18	0.0-2.9	0.2-0.5	.32
	16-26	45-55-65	17	20-28-35	1.40-1.60	4.23-14.11	0.11-0.18	3.0-5.9	0.0-0.2	.32
	26-40	45-55-65	17	20-28-35	1.40-1.60	4.23-14.11	0.11-0.18	3.0-5.9	0.0-0.2	.32
	40-42	---	--	---	---	1.41-14.11	---	---	---	---
22:										
Cupco-----	0-2	5-11-15	68	15-20-26	1.30-1.50	4.23-14.11	0.16-0.24	0.0-2.9	0.5-2.0	.37
	2-25	5- 7-10	70	15-22-27	1.30-1.60	1.41-14.11	0.15-0.24	3.0-5.9	0.5-1.0	.37
	25-41	5- 7-10	62	27-31-35	1.45-1.60	1.41-4.23	0.18-0.22	3.0-5.9	0.0-1.0	.32
	41-62	5- 6-10	60	27-34-40	1.45-1.60	1.41-4.23	0.18-0.22	3.0-5.9	0.0-0.5	.32
	62-80	5- 7-30	62	27-31-35	1.45-1.60	1.41-4.23	0.15-0.22	3.0-5.9	0.0-0.5	.32
23:										
Dam.										
24, 25:										
Dela-----	0-3	55-68-75	21	7-12-20	1.20-1.40	14.11-42.34	0.10-0.15	0.0-2.9	0.5-2.0	.20
	3-8	55-70-75	16	7-14-20	1.20-1.40	14.11-42.34	0.10-0.15	0.0-2.9	0.5-2.0	.20
	8-45	55-68-75	21	7-12-20	1.30-1.60	14.11-42.34	0.10-0.15	0.0-2.9	0.5-1.0	.20
	45-51	45-68-75	21	7-12-20	1.50-1.70	14.11-42.34	0.10-0.20	0.0-2.9	0.0-0.5	.32
	51-80	45-68-75	21	7-12-20	1.50-1.70	14.11-42.34	0.07-0.15	0.0-2.9	0.0-0.5	.20

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
		Pct	Pct	Pct	g/cc		In/in	Pct	Pct	
26: Delight-----	In									
	0-4	0- 7-10	49	40-44-50	1.00-1.20	1.42-4.23	0.14-0.18	6.0-8.9	1.0-3.0	.37
	4-8	0- 3- 5	47	35-50-60	1.00-1.20	1.42-4.23	0.14-0.18	6.0-8.9	0.5-2.0	.37
	8-12	0- 2- 5	43	40-55-60	1.00-1.20	1.42-4.23	0.14-0.18	9.0-12.9	0.5-2.0	.37
	12-20	0- 2- 5	44	40-54-60	1.00-1.20	1.42-4.23	0.14-0.18	9.0-12.9	0.5-1.0	.37
	20-29	0- 2- 5	42	40-57-60	1.00-1.20	1.42-4.23	0.14-0.18	9.0-12.9	0.2-0.8	.37
	29-41	0- 1- 5	41	35-58-60	1.00-1.20	1.42-4.23	0.14-0.18	9.0-12.9	0.2-0.8	.37
	41-70	0- 1- 5	41	35-58-60	1.00-1.20	1.42-4.23	0.14-0.18	9.0-12.9	0.0-0.2	.37
	70-84	0- 1- 5	37	35-62-65	1.00-1.20	1.42-4.23	0.14-0.18	9.0-12.9	0.0-0.2	.37
27: Gurdon-----										
	0-2	50-64-65	26	5-10-15	1.25-1.55	4.23-14.11	0.13-0.20	0.0-2.9	1.0-3.0	.43
	2-7	50-64-65	26	5-10-15	1.25-1.55	4.23-14.11	0.13-0.20	0.0-2.9	0.5-1.0	.43
	7-21	50-63-65	23	10-14-18	1.25-1.55	4.23-14.11	0.13-0.20	0.0-2.9	0.0-0.5	.43
	21-38	5- 7-40	65	15-28-35	1.25-1.60	4.23-14.11	0.13-0.20	3.0-5.9	0.0-0.5	.43
	38-80	5- 7-40	65	15-28-35	1.25-1.60	4.23-14.11	0.13-0.20	3.0-5.9	0.0-0.5	.43
28, 29, 20: Guyton-----										
	0-5	5-14-15	70	7-16-25	1.35-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-4.0	.43
	5-15	5-14-15	70	7-16-25	1.35-1.70	0.42-1.40	0.15-0.22	0.0-2.9	0.5-1.0	.37
	15-40	5- 7-10	66	20-28-35	1.35-1.70	0.42-1.40	0.15-0.22	0.0-2.9	0.0-0.5	.37
	40-80	5- 7-30	66	20-28-35	1.35-1.70	0.42-1.40	0.15-0.22	0.0-2.9	0.0-0.5	.37
31: Japany-----										
	0-6	5-14-20	57	28-29-40	1.30-1.50	0.42-1.41	0.20-0.22	0.0-2.9	0.5-2.0	.32
	6-12	5-16-20	52	28-32-40	1.50-1.70	0.42-1.41	0.20-0.22	0.0-2.9	0.5-2.0	.32
	12-22	5-12-20	47	35-41-60	1.40-1.60	0.42-1.41	0.20-0.22	6.0-8.9	0.5-1.0	.32
	22-37	0- 9-15	42	40-49-60	1.30-1.50	0.42-1.14	0.18-0.20	9.0-25.0	0.2-0.8	.32
	37-55	0-10-15	47	40-44-60	1.40-1.60	0.00-0.42	0.18-0.20	9.0-25.0	0.0-0.5	.32
	55-80	5-15-20	43	40-42-60	1.40-1.50	0.00-0.42	0.18-0.20	9.0-25.0	0.0-0.5	.32
32, 33, 34: Kenn-----										
	0-6	55-69-70	16	10-15-20	1.30-1.60	4.23-14.11	0.10-0.18	0.0-2.9	0.5-2.0	.24
	6-12	40-44-65	41	10-15-20	1.30-1.60	4.23-14.11	0.10-0.18	0.0-2.9	0.5-2.0	.24
	12-28	35-57-60	18	20-25-30	1.45-1.70	4.23-14.11	0.06-0.18	3.0-5.9	0.2-0.8	.28
	28-42	30-38-45	36	20-25-30	1.45-1.70	4.23-14.11	0.02-0.10	3.0-5.9	0.0-0.2	.28
	42-80	35-43-65	40	10-18-25	1.40-1.70	4.23-14.11	0.02-0.05	0.0-2.9	0.0-0.2	.32
35: Kenn-----										
	0-6	55-69-70	16	7-15-20	1.20-1.40	4.23-14.11	0.10-0.18	0.0-2.9	1.0-2.0	.17
	6-12	40-44-65	41	10-15-20	1.30-1.60	4.23-14.11	0.10-0.18	0.0-2.9	0.5-2.0	.24
	12-28	35-57-60	18	20-25-30	1.45-1.70	4.23-14.11	0.06-0.18	3.0-5.9	0.2-0.8	.28
	28-42	30-38-45	36	20-25-30	1.45-1.70	4.23-14.11	0.02-0.10	3.0-5.9	0.0-0.2	.28
	42-80	35-43-65	40	10-18-25	1.40-1.70	4.23-14.11	0.02-0.05	0.0-2.9	0.0-0.2	.32

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	Kw
35: Ceda-----	0-12	60-70-75	16	10-14-18	1.40-1.60	42.34-141.14	0.05-0.12	0.0-2.9	1.0-2.0	.24
	12-22	60-70-75	16	7-14-20	1.40-1.60	42.34-141.14	0.05-0.12	0.0-2.9	0.5-1.0	.17
	22-55	60-70-75	16	10-14-18	1.30-1.60	42.34-141.14	0.05-0.12	0.0-2.9	0.5-1.0	.17
	55-80	60-73-75	14	7-14-20	1.40-1.70	42.34-141.14	0.02-0.16	0.0-2.9	0.5-1.0	.28
36: Kizzia-----	0-4	15-36-40	54	5-10-15	1.40-1.60	14.11-42.32	0.10-0.14	0.0-2.9	1.0-3.0	.28
	4-7	15-35-65	53	5-12-15	1.40-1.60	14.11-42.32	0.10-0.14	0.0-2.9	0.5-1.0	.37
	7-12	15-31-65	52	15-17-35	1.40-1.60	4.23-14.11	0.10-0.14	0.0-2.9	0.5-1.0	.37
	12-36	15-28-40	48	15-24-35	1.40-1.60	4.23-14.11	0.10-0.14	0.0-2.9	0.0-0.5	.32
	36-80	15-34-65	47	15-19-35	1.55-1.85	4.23-14.11	0.10-0.14	0.0-2.9	0.0-0.5	.37
37: Leeper-----	0-3	5-18-20	49	27-34-40	1.45-1.65	0.42-1.41	0.18-0.22	6.0-8.9	1.0-4.0	.32
	3-10	2- 5-15	53	27-42-60	1.00-1.20	0.00-0.42	0.18-0.22	6.0-8.9	0.5-2.0	.32
	10-51	5-20-25	36	40-44-60	1.00-1.20	0.00-0.42	0.18-0.22	6.0-8.9	0.2-0.8	.32
	51-95	5-20-25	38	35-42-50	1.40-1.60	0.00-0.42	0.18-0.20	6.0-8.9	0.2-0.8	.32
38: Littlefir-----	0-2	20-30-35	55	7-15-20	1.30-1.60	4.23-14.11	0.11-0.16	0.0-2.9	0.5-2.0	.28
	2-9	20-30-35	52	7-18-20	1.45-1.75	1.41-14.11	0.10-0.20	3.0-5.9	0.5-1.0	.37
	9-35	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.10-0.18	6.0-8.9	0.0-0.5	.32
	35-43	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.06-0.18	6.0-8.9	0.0-0.5	.32
	43-50	---	--	---	1.85-2.00	1.41-4.23	---	---	---	---
Carnasaw-----	0-3	20-26-35	53	15-20-26	1.20-1.40	4.23-14.11	0.11-0.17	0.0-2.9	0.5-2.0	.32
	3-10	20-26-35	53	15-20-26	1.45-1.70	1.41-4.23	0.10-0.19	6.0-8.9	0.0-0.5	.37
	10-40	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.10-0.15	6.0-8.9	0.0-0.5	.24
	40-58	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.08-0.12	6.0-8.9	0.0-0.5	.17
	58-60	---	--	---	1.85-2.00	0.00-1.41	---	---	---	---
39: Magnet-----	0-8	-42-	38	15-20-25	1.40-1.60	14.11-42.32	0.12-0.14	0.0-2.9	2.0-4.0	.28
	8-23	-26-	29	35-45-55	1.25-1.45	1.41-4.23	0.13-0.18	6.0-8.9	0.5-1.0	.28
	23-31	-28-	34	30-38-55	1.25-1.45	1.41-4.23	0.13-0.18	6.0-8.9	0.0-0.5	.28
	31-72	---	--	---	---	1.41-14.11	---	---	---	---
40: Marietta-----	0-16	35-42-50	38	12-20-25	1.20-1.40	14.11-42.32	0.14-0.18	0.0-2.9	2.0-4.0	.32
	16-29	15-17-20	49	28-34-40	1.20-1.40	4.23-14.11	0.14-0.18	2.9-5.9	0.5-2.0	.32
	29-57	15-17-20	49	28-34-40	1.20-1.40	4.23-14.11	0.14-0.18	2.9-5.9	0.0-0.5	.32
	57-72	15-17-20	49	28-34-40	1.20-1.40	4.23-14.11	0.14-0.18	2.9-5.9	0.0-0.5	.32
	72-85	30-38-50	36	15-25-27	1.50-1.55	4.23-14.11	0.14-0.18	0.0-2.9	0.0-0.5	.28

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
41, 42: Mazarn-----	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
	0-4	15-29-35	53	10-18-25	1.30-1.50	4.23-14.11	0.18-0.22	0.0-2.9	2.0-4.0	.37
	4-10	15-23-35	54	7-22-27	1.30-1.60	1.41-14.11	0.16-0.20	0.0-2.9	0.5-1.0	.37
	10-21	15-16-35	50	10-34-40	1.30-1.50	1.41-14.11	0.16-0.20	0.0-2.9	0.5-1.0	.32
	21-36	15-20-35	50	10-30-35	1.30-1.50	1.41-4.23	0.12-0.20	0.0-2.9	0.0-0.5	.32
	36-40	---	--	---	---	0.07-4.23	---	---	---	---
43: McCaskill-----	0-4	30-45-50	50	5- 5-18	1.20-1.40	4.23-14.11	0.12-0.18	0.0-2.9	0.5-2.0	.28
	4-13	30-43-50	50	5- 6-18	1.60-1.90	4.23-14.11	0.12-0.18	0.0-2.9	0.5-1.5	.28
	13-23	35-39-65	53	5- 8-18	1.50-1.80	4.23-14.11	0.12-0.18	0.0-2.9	0.0-0.5	.28
	23-37	35-37-65	51	5-12-18	1.50-1.80	4.23-14.11	0.12-0.18	0.0-2.9	0.0-0.5	.28
	37-61	30-33-65	50	5-16-30	1.50-1.70	1.41-4.23	0.07-0.11	0.0-2.9	0.0-0.2	.37
	61-80	30-37-65	43	5-19-30	1.60-1.75	1.41-4.23	0.07-0.11	0.0-2.9	0.0-0.2	.37
44: Mena-----	0-5	25-31-45	56	7-13-27	1.35-1.50	4.23-14.11	0.12-0.16	0.0-2.9	2.0-4.0	.32
	5-12	35-45-50	42	7-13-27	1.35-1.50	4.23-14.11	0.14-0.20	0.0-2.9	2.0-4.0	.37
	12-19	5-10-35	56	10-34-40	1.30-1.50	4.23-14.11	0.12-0.20	0.0-2.9	0.5-2.0	.32
	19-31	5- 6-30	47	27-48-60	1.25-1.40	1.41-4.23	0.16-0.20	3.0-5.9	0.5-1.0	.32
	31-62	5- 8-30	50	27-42-60	1.25-1.40	1.41-4.23	0.08-0.16	3.0-5.9	0.5-1.0	.28
	62-80	---	--	---	---	1.41-4.23	0.00-0.00	---	---	---
45: Mena-----	0-5	25-31-45	56	7-13-27	1.35-1.50	4.23-14.11	0.12-0.16	0.0-2.9	2.0-4.0	.32
	5-12	35-45-50	42	7-13-27	1.35-1.50	4.23-14.11	0.14-0.20	0.0-2.9	2.0-4.0	.37
	12-19	5-10-35	56	10-34-40	1.30-1.50	4.23-14.11	0.12-0.20	0.0-2.9	0.5-2.0	.32
	19-31	5- 6-30	47	27-48-60	1.25-1.40	1.41-4.23	0.16-0.20	3.0-5.9	0.5-1.0	.32
	31-62	5- 8-30	50	27-42-60	1.25-1.40	1.41-4.23	0.08-0.16	3.0-5.9	0.5-1.0	.28
	62-80	---	--	---	---	1.41-4.23	0.00-0.00	---	---	---
46: Mena-----	0-5	25-31-45	56	7-13-27	1.20-1.40	4.23-14.11	0.14-0.20	0.0-2.9	2.0-4.0	.32
	5-12	35-45-50	42	7-13-27	1.35-1.50	4.23-14.11	0.14-0.20	0.0-2.9	2.0-4.0	.37
	12-19	5-10-35	56	10-34-40	1.30-1.50	4.23-14.11	0.12-0.20	0.0-2.9	0.5-2.0	.32
	19-31	5- 6-30	47	27-48-60	1.25-1.40	1.41-4.23	0.16-0.20	3.0-5.9	0.5-1.0	.32
	31-62	5- 8-30	50	27-42-60	1.25-1.40	1.41-4.23	0.08-0.16	3.0-5.9	0.5-1.0	.28
	62-80	---	--	---	---	1.41-4.23	0.00-0.00	---	---	---
47: Murfreesboro-----	0-6	30-36-45	44	15-20-27	1.20-1.40	4.23-14.11	0.10-0.18	0.0-2.9	0.5-2.0	.24
	6-31	30-30-55	40	20-30-35	1.20-1.40	4.23-14.11	0.10-0.18	2.9-5.9	0.5-1.5	.32
	31-42	30-32-55	33	20-35-35	1.20-1.40	4.23-14.11	0.10-0.18	2.9-5.9	0.0-0.5	.32
	42-80	30-50-55	28	20-22-35	1.20-1.40	4.23-14.11	0.10-0.18	0.0-2.9	0.0-0.2	.32

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	Pct	Pct	g/cc		In/in	Pct	Pct	Kw
48: Murfreesboro-----	0-6	30-36-55	44	15-20-27	1.20-1.40	4.23-14.11	0.10-0.18	0.0-2.9	0.5-2.0	.24
	6-31	30-30-55	40	20-30-35	1.20-1.40	4.23-14.11	0.10-0.18	2.9-5.9	0.5-1.5	.32
	31-42	30-32-55	33	20-35-35	1.20-1.40	4.23-14.11	0.10-0.18	2.9-5.9	0.0-0.5	.32
	42-80	30-50-55	28	20-22-35	1.20-1.40	4.23-14.11	0.10-0.18	0.0-2.9	0.0-0.2	.32
49: Nathan-----	0-7	10-20-25	72	5- 7-20	1.30-1.50	4.23-14.11	0.14-0.18	0.0-2.9	1.0-3.0	.28
	7-14	10-20-25	73	5- 8-20	1.30-1.50	4.23-14.11	0.14-0.18	0.0-2.9	0.5-2.0	.28
	14-19	10-21-25	66	5-13-20	1.30-1.50	4.23-14.11	0.14-0.18	0.0-2.9	0.5-1.0	.28
	19-26	10-16-25	56	27-27-35	1.30-1.50	4.23-14.11	0.14-0.18	0.0-2.9	0.2-0.8	.28
50: Nashoba-----	26-35	10-19-25	54	27-27-35	1.30-1.50	4.23-14.11	0.14-0.18	0.0-2.9	0.2-0.8	.28
	35-50	15-24-25	59	15-18-25	1.30-1.50	4.23-14.11	0.14-0.18	0.0-2.9	0.0-0.2	.28
	50-80	15-34-35	53	5-13-20	1.30-1.50	4.23-14.11	0.14-0.18	0.0-2.9	0.0-0.2	.28
51: Nashoba-----	0-4	60-72-75	16	7-12-18	1.30-1.60	14.11-42.34	0.05-0.14	0.0-2.9	0.5-1.0	.17
	4-28	60-72-75	16	7-12-18	1.40-1.70	14.11-42.34	0.02-0.12	0.0-2.9	0.0-0.5	.17
	28-53	60-70-75	16	7-14-20	1.30-1.55	14.11-42.34	0.07-0.17	0.0-2.9	0.0-1.0	.28
	53-55	---	--	---	---	0.07-4.23	0.00-0.00	---	---	---
Bismarck-----	0-6	15-30-35	56	10-14-18	1.30-1.50	4.23-14.11	0.11-0.17	0.0-2.9	0.5-2.0	.32
	6-16	15-30-45	56	12-14-20	1.30-1.55	4.23-14.11	0.07-0.17	0.0-2.9	0.5-2.0	.28
	16-20	---	--	---	---	0.07-4.23	0.00-0.00	---	---	---
Littlefir-----	0-2	20-30-35	55	10-15-20	1.20-1.40	1.41-14.11	0.10-0.20	3.0-5.9	0.5-2.0	.28
	2-9	20-30-35	52	7-18-20	1.45-1.75	1.41-14.11	0.10-0.20	3.0-5.9	0.5-1.0	.37
	9-35	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.10-0.18	6.0-8.9	0.0-0.5	.32
	35-43	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.06-0.18	6.0-8.9	0.0-0.5	.32
51: Nashoba-----	43-50	---	--	---	1.85-2.00	1.41-4.23	---	---	---	---
Bismarck-----	0-4	60-70-75	16	10-14-18	1.30-1.50	14.11-42.34	0.11-0.17	0.0-2.9	0.5-2.0	.32
	4-28	60-72-75	16	7-12-18	1.40-1.70	14.11-42.34	0.02-0.12	0.0-2.9	0.0-0.5	.17
	28-53	60-70-75	16	7-14-20	1.30-1.55	14.11-42.34	0.07-0.17	0.0-2.9	0.0-1.0	.28
	53-55	---	--	---	---	0.07-4.23	0.00-0.00	---	---	---
Bismarck-----	0-6	15-30-35	56	12-14-20	1.30-1.50	4.23-14.11	0.11-0.17	0.0-2.9	0.5-2.0	.32
	6-16	15-30-45	56	12-14-20	1.30-1.55	4.23-14.11	0.07-0.17	0.0-2.9	0.5-2.0	.28
	16-20	---	--	---	---	0.07-4.23	0.00-0.00	---	---	---
Littlefir-----	0-2	20-30-35	55	10-15-20	1.20-1.40	1.41-14.11	0.10-0.20	3.0-5.9	0.5-2.0	.28
	2-9	20-30-35	52	7-18-20	1.45-1.75	1.41-14.11	0.10-0.20	3.0-5.9	0.5-1.0	.37
	9-35	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.10-0.18	6.0-8.9	0.0-0.5	.32
	35-43	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.06-0.18	6.0-8.9	0.0-0.5	.32
43-50	43-50	---	--	---	1.85-2.00	1.41-4.23	---	---	---	---

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
52: Nashoba-----	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	Kw
	0-4	60-72-75	16	7-12-18	1.30-1.55	14.11-42.34	0.05-0.14	0.0-2.9	0.5-1.0	.20
	4-28	60-72-75	16	7-12-18	1.40-1.70	14.11-42.34	0.02-0.12	0.0-2.9	0.0-0.5	.17
	28-53	60-70-75	16	7-14-20	1.30-1.55	14.11-42.34	0.07-0.17	0.0-2.9	0.0-1.0	.28
	53-55	---	--	---	---	0.07-4.23	0.00-0.00	---	---	---
Littlefir-----	0-2	55-69-70	16	10-15-20	1.30-1.60	4.23-14.11	0.15-0.20	0.0-2.9	0.5-2.0	.43
	2-9	55-57-70	30	7-14-20	1.45-1.75	1.41-14.11	0.10-0.20	3.0-5.9	0.5-1.0	.37
	9-35	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.10-0.18	6.0-8.9	0.0-0.5	.32
	35-43	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.06-0.18	6.0-8.9	0.0-0.5	.32
	43-50	---	--	---	1.85-2.00	1.41-4.23	---	---	---	---
Sherless-----	0-5	55-69-75	16	10-15-20	1.30-1.60	4.23-14.11	0.15-0.20	0.0-2.9	0.5-2.0	.43
	5-8	55-68-75	21	8-12-15	1.50-1.55	14.11-42.34	0.11-0.13	0.0-2.9	0.5-1.0	.28
	8-17	40-70-75	16	10-14-18	1.45-1.55	14.11-42.34	0.11-0.18	0.0-2.9	0.5-1.0	.28
	17-27	40-60-65	18	20-22-35	1.40-1.50	4.23-14.11	0.12-0.18	0.0-2.9	0.0-0.5	.28
	27-39	50-57-65	16	20-28-35	1.25-1.50	4.23-14.11	0.11-0.18	6.0-8.9	0.0-0.5	.32
	39-45	---	--	---	---	1.41-14.11	0.00-0.00	---	---	---
53: Neff-----	0-2	30-37-40	42	15-20-26	1.30-1.55	4.23-14.11	0.15-0.24	0.0-2.9	0.5-3.0	.43
	2-14	10-20-25	64	7-17-27	1.40-1.70	1.41-4.23	0.16-0.24	3.0-5.9	0.5-2.0	.32
	14-26	5-14-20	69	7-17-27	1.40-1.70	1.41-4.23	0.16-0.24	3.0-5.9	0.2-0.8	.32
	26-48	5- 6-15	60	27-34-40	1.40-1.70	1.41-4.23	0.16-0.24	3.0-5.9	0.0-0.5	.32
	48-80	5- 7-15	61	27-32-40	1.40-1.70	1.41-4.23	0.16-0.24	3.0-5.9	0.0-0.5	.32
54, 55, 56: Ochlocknee-----	0-4	55-66-70	23	3-10-18	1.40-1.60	14.11-42.34	0.07-0.14	0.0-2.9	0.5-2.0	.20
	4-39	40-70-75	16	8-13-18	1.40-1.60	14.11-42.34	0.10-0.20	0.0-2.9	0.5-1.0	.20
	39-55	55-69-80	15	3-16-18	1.40-1.70	14.11-42.34	0.06-0.12	0.0-2.9	0.5-1.0	.17
	55-80	70-79-85	17	1- 4- 8	1.40-1.60	14.11-42.34	0.06-0.12	0.0-2.9	0.2-0.8	.17
57, 58: Ouachita-----	0-9	15-21-40	69	1-10-15	1.20-1.40	4.23-14.11	0.15-0.22	0.0-2.9	1.0-2.0	.37
	9-38	5- 7-40	63	8-30-35	1.35-1.60	4.23-14.11	0.15-0.22	0.0-2.9	1.0-2.0	.37
	38-52	5- 6-40	59	28-35-40	1.20-1.40	4.23-14.11	0.15-0.22	3.0-5.9	0.5-1.0	.37
	52-77	5- 6-40	62	25-32-35	1.35-1.60	4.23-14.11	0.15-0.22	0.0-2.9	0.5-1.0	.37
	77-88	5-32-50	43	10-25-35	1.35-1.60	1.41-4.23	0.15-0.22	0.0-2.9	0.5-1.0	.32
59, 60: Ozan-----	0-1	60-70-75	22	3- 8-12	1.30-1.50	4.23-14.11	0.11-0.15	0.0-2.9	0.5-3.0	.28
	1-7	30-68-70	21	5-12-18	1.30-1.50	4.23-14.11	0.10-0.17	0.0-2.9	0.0-0.5	.28
	7-15	40-70-75	16	7-14-20	1.30-1.60	4.23-14.11	0.11-0.20	0.0-2.9	0.0-0.5	.28
	15-24	60-68-75	21	5-12-18	1.20-1.40	4.23-14.11	0.11-0.20	0.0-2.9	0.0-2.5	.28
	24-80	60-68-75	21	5-12-18	1.20-1.40	4.23-14.11	0.11-0.20	0.0-2.9	0.0-2.5	.28

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
61: Peanutrock-----	0-4	55-64-65	24	5-12-20	1.35-1.60	14.11-42.34	0.07-0.17	0.0-2.9	1.0-2.0	.20
	4-10	40-55-65	28	10-18-25	1.35-1.60	4.23-14.11	0.06-0.15	0.0-2.9	0.5-1.0	.28
	10-33	40-43-65	40	10-18-25	1.30-1.50	4.23-14.11	0.06-0.15	0.0-2.9	0.0-0.5	.28
	33-80	55-78-85	16	2- 5-25	1.40-1.65	4.23-42.34	0.04-0.11	0.0-2.9	0.0-0.5	.17
62: Peanutrock-----	0-4	55-64-65	24	5-12-20	1.35-1.60	14.11-42.34	0.07-0.17	0.0-2.9	1.0-2.0	.20
	4-10	40-55-65	28	10-18-25	1.35-1.60	4.23-14.11	0.06-0.15	0.0-2.9	0.5-1.0	.28
	10-33	40-43-65	40	10-18-25	1.30-1.50	4.23-14.11	0.06-0.15	0.0-2.9	0.0-0.5	.28
	33-80	55-78-85	16	2- 5-25	1.40-1.65	4.23-42.34	0.04-0.11	0.0-2.9	0.0-0.5	.17
63: Peanutrock-----	0-4	55-64-65	24	5-12-20	1.35-1.60	14.11-42.34	0.07-0.17	0.0-2.9	1.0-2.0	.20
	4-10	40-55-65	28	10-18-25	1.35-1.60	4.23-14.11	0.06-0.15	0.0-2.9	0.5-1.0	.28
	10-33	40-43-65	40	10-18-25	1.30-1.50	4.23-14.11	0.06-0.15	0.0-2.9	0.0-0.5	.28
	33-80	55-78-85	16	2- 5-25	1.40-1.65	4.23-42.34	0.04-0.11	0.0-2.9	0.0-0.5	.17
64: Peanutrock-----	0-4	55-64-65	24	5-12-20	1.35-1.60	14.11-42.34	0.07-0.17	0.0-2.9	1.0-2.0	.20
	4-10	40-55-65	28	10-18-25	1.35-1.60	4.23-14.11	0.06-0.15	0.0-2.9	0.5-1.0	.28
	10-33	40-43-65	40	10-18-25	1.30-1.50	4.23-14.11	0.06-0.15	0.0-2.9	0.0-0.5	.28
	33-80	55-78-85	16	2- 5-25	1.40-1.65	4.23-42.34	0.04-0.11	0.0-2.9	0.0-0.5	.17
Tiak-----	0-6	55-63-70	23	10-14-18	1.30-1.50	4.23-14.11	0.09-0.12	0.0-2.9	1.0-3.0	.28
	6-19	5- 6-30	47	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	3.0-5.9	0.5-1.0	.32
	19-27	5-23-30	29	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	6.0-8.9	0.2-0.8	.32
	27-40	5-23-30	29	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	6.0-8.9	0.0-0.5	.32
	40-80	5-23-30	29	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	6.0-8.9	0.0-0.0	.32
65: Pikecity-----	0-3	20-28-30	61	10-11-15	1.20-1.40	4.23-14.11	0.10-0.15	0.0-2.9	0.5-2.0	.24
	3-6	20-23-30	60	12-17-25	1.20-1.40	4.23-14.11	0.10-0.15	0.0-2.9	0.5-1.5	.24
	6-22	15-21-25	49	28-30-40	1.20-1.40	4.23-14.11	0.10-0.15	3.0-5.9	0.2-0.8	.37
	22-31	15-20-25	38	28-38-40	1.30-1.50	4.23-14.11	0.10-0.15	0.0-2.9	0.0-0.5	.37
	31-48	15-17-25	30	35-53-55	1.40-1.60	14.11-42.34	0.05-0.10	0.0-2.9	0.0-0.2	.10
	48-80	25-31-35	29	35-40-55	1.40-1.60	14.11-42.34	0.04-0.08	0.0-2.9	0.0-0.2	.10
66: Pikecreek-----	0-4	70-75-90	16	5- 9-15	1.20-1.40	42.34-141.14	0.02-0.16	0.0-2.9	0.5-2.0	.17
	4-20	75-78-95	8	2-14-15	1.20-1.40	42.34-141.14	0.02-0.16	0.0-2.9	0.5-1.0	.28
	20-33	75-89-95	4	2- 7-12	1.20-1.40	42.34-141.14	0.02-0.16	0.0-2.9	0.5-1.0	.28
	33-80	75-87-95	3	2-10-12	1.40-1.70	42.34-141.14	0.02-0.16	0.0-2.9	0.0-0.5	.28

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	Pct	Pct	g/cc		In/in	Pct	Pct	Kw
67: Pirum-----	0-3	30-69-70	16	10-15-20	1.30-1.60	4.23-14.11	0.08-0.12	0.0-2.9	0.5-2.0	.20
	3-7	45-67-70	14	10-18-27	1.30-1.60	4.23-14.11	0.08-0.17	0.0-2.9	0.5-1.0	.24
	7-16	35-38-50	36	7-26-27	1.25-1.60	4.23-14.11	0.11-0.18	0.0-2.9	0.2-0.5	.32
	16-26	45-55-65	17	20-28-35	1.40-1.60	4.23-14.11	0.11-0.18	3.0-5.9	0.0-0.2	.32
	26-40	45-55-65	17	20-28-35	1.40-1.60	4.23-14.11	0.11-0.18	3.0-5.9	0.0-0.2	.32
	40-42	---	--	---	---	1.41-14.11	---	---	---	---
Sherless-----	0-5	55-70-75	22	7- 8-20	1.50-1.60	14.11-42.34	0.11-0.13	0.0-2.9	1.0-4.0	.28
	5-8	55-68-75	21	8-12-15	1.50-1.55	14.11-42.34	0.11-0.13	0.0-2.9	0.5-1.0	.28
	8-17	40-70-75	16	10-14-18	1.45-1.55	14.11-42.34	0.11-0.18	0.0-2.9	0.5-1.0	.28
	17-27	40-60-65	18	20-22-35	1.40-1.50	4.23-14.11	0.12-0.18	0.0-2.9	0.0-0.5	.28
	27-39	50-55-65	18	20-28-35	1.25-1.50	4.23-14.11	0.11-0.18	6.0-8.9	0.0-0.5	.32
	39-45	---	--	---	---	1.41-14.11	0.00-0.00	---	---	---
Bonnerdale-----	0-3	50-70-70	22	7- 8-20	1.50-1.60	14.11-42.34	0.11-0.13	0.0-2.9	1.0-4.0	.28
	3-13	50-68-70	21	7-12-20	1.50-1.55	14.11-42.34	0.11-0.13	0.0-2.9	0.5-1.0	.28
	13-24	50-70-70	16	7-14-20	1.45-1.55	14.11-42.34	0.11-0.18	0.0-2.9	0.5-1.0	.28
	24-35	50-64-70	23	7-14-20	1.40-1.50	4.23-14.11	0.12-0.18	0.0-2.9	0.0-0.5	.28
	35-43	50-55-70	28	7-17-20	1.25-1.50	4.23-14.11	0.11-0.18	0.0-2.9	0.0-0.5	.32
	43-54	50-55-70	29	7-16-20	1.25-1.50	4.23-14.11	0.11-0.18	0.0-2.9	0.0-0.5	.32
68: Pits.	54-60	---	--	---	---	1.41-14.11	---	---	---	---
69: Riverwash.	---	---	--	---	---	---	---	---	---	---
Ceda-----	0-12	60-70-75	16	10-14-18	1.40-1.60	42.34-141.14	0.05-0.12	0.0-2.9	1.0-2.0	.24
	12-22	60-70-75	16	7-14-20	1.40-1.60	42.34-141.14	0.05-0.12	0.0-2.9	0.5-1.0	.17
	22-55	60-70-75	16	10-14-18	1.30-1.60	42.34-141.14	0.05-0.12	0.0-2.9	0.5-1.0	.17
	55-80	60-73-75	14	7-14-20	1.40-1.70	42.34-141.14	0.02-0.16	0.0-2.9	0.5-1.0	.28
70, 71: Sardis-----	0-10	5-14-15	69	10-18-25	1.20-1.40	4.23-14.14	0.12-0.18	0.0-2.9	1.0-3.0	.37
	10-20	5-14-15	69	10-18-25	1.20-1.40	4.23-14.14	0.12-0.18	0.0-2.9	0.5-2.0	.37
	20-61	5- 7-15	63	20-30-35	1.20-1.40	4.23-14.14	0.12-0.18	2.9-5.9	0.2-0.8	.37
	61-73	5-14-15	64	20-23-35	1.20-1.40	4.23-14.14	0.12-0.18	2.9-5.9	0.2-0.8	.37
	73-80	5- 7-65	63	10-30-35	1.20-1.40	4.23-14.14	0.12-0.18	2.9-5.9	0.0-0.2	.37

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	Pct	Pct	g/cc	In/in	Pct	Pct	Pct	Kw
72: Sherless-----	0-5	55-68-75	21	7-12-20	1.20-1.40	14.11-42.34	0.11-0.13	0.0-2.9	0.8-2.0	.20
	5-8	55-68-75	21	8-12-15	1.50-1.55	14.11-42.34	0.11-0.13	0.0-2.9	0.5-1.0	.28
	8-17	40-70-75	16	10-14-18	1.45-1.55	14.11-42.34	0.11-0.18	0.0-2.9	0.5-1.0	.28
	17-27	40-60-65	18	20-22-35	1.40-1.50	4.23-14.11	0.12-0.18	0.0-2.9	0.0-0.5	.28
	27-39	50-60-65	13	20-28-35	1.25-1.50	4.23-14.11	0.11-0.18	6.0-8.9	0.0-0.5	.32
	39-45	---	--	---	---	1.41-14.11	0.00-0.00	---	---	---
	0-2	55-69-70	16	10-15-20	1.30-1.60	4.23-14.11	0.15-0.20	0.0-2.9	0.5-2.0	.43
	2-9	55-57-70	30	7-14-20	1.45-1.75	1.41-14.11	0.10-0.20	3.0-5.9	0.5-1.0	.37
	9-35	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.10-0.18	6.0-8.9	0.0-0.5	.32
	35-43	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.06-0.18	6.0-8.9	0.0-0.5	.32
73: Sherless-----	43-50	---	--	---	1.85-2.00	1.41-4.23	---	---	---	---
	0-5	55-68-75	21	7-12-18	1.20-1.40	14.11-42.34	0.11-0.13	0.0-2.9	0.5-2.0	.20
	5-8	55-68-75	21	8-12-15	1.50-1.55	14.11-42.34	0.11-0.13	0.0-2.9	0.5-1.0	.28
	8-17	40-70-75	16	10-14-18	1.45-1.55	14.11-42.34	0.11-0.18	0.0-2.9	0.5-1.0	.28
	17-27	40-60-65	18	20-22-35	1.40-1.50	4.23-14.11	0.12-0.18	0.0-2.9	0.0-0.5	.28
	27-39	50-55-65	18	20-28-35	1.25-1.50	4.23-14.11	0.11-0.18	6.0-8.9	0.0-0.5	.32
	39-45	---	--	---	---	1.41-14.11	0.00-0.00	---	---	---
	0-2	55-69-70	16	10-15-20	1.30-1.60	4.23-14.11	0.15-0.20	0.0-2.9	0.5-2.0	.43
	2-9	55-57-70	30	7-14-20	1.45-1.75	1.41-14.11	0.10-0.20	3.0-5.9	0.5-1.0	.37
	9-35	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.10-0.18	6.0-8.9	0.0-0.5	.32
74: Sherless-----	35-43	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.06-0.18	6.0-8.9	0.0-0.5	.32
	43-50	---	--	---	1.85-2.00	1.41-4.23	---	---	---	---
	0-4	60-70-75	16	10-14-18	1.30-1.50	14.11-42.34	0.11-0.17	0.0-2.9	0.5-2.0	.32
	4-28	60-72-75	16	7-12-18	1.40-1.70	14.11-42.34	0.02-0.12	0.0-2.9	0.0-0.5	.17
	28-53	60-70-75	16	7-14-20	1.30-1.55	14.11-42.34	0.07-0.17	0.0-2.9	0.0-1.0	.28
	53-55	---	--	---	---	0.07-4.23	0.00-0.00	---	---	---
	0-5	55-68-75	21	7-12-18	1.20-1.40	14.11-42.34	0.11-0.13	0.0-2.9	0.5-2.0	.20
	5-8	55-68-75	21	8-12-15	1.50-1.55	14.11-42.34	0.11-0.13	0.0-2.9	0.5-1.0	.28
	8-17	40-70-75	16	10-14-18	1.45-1.55	14.11-42.34	0.11-0.18	0.0-2.9	0.5-1.0	.28
	17-27	40-60-65	18	20-22-35	1.40-1.50	4.23-14.11	0.12-0.18	0.0-2.9	0.0-0.5	.28
Littlefir-----	27-39	50-55-65	18	20-28-35	1.25-1.50	4.23-14.11	0.11-0.18	6.0-8.9	0.0-0.5	.32
	39-45	---	--	---	---	1.41-14.11	0.00-0.00	---	---	---
	0-2	55-69-70	16	10-15-20	1.30-1.60	4.23-14.11	0.15-0.20	0.0-2.9	0.5-2.0	.43
	2-9	55-57-70	30	7-14-20	1.45-1.75	1.41-14.11	0.10-0.20	3.0-5.9	0.5-1.0	.37
	9-35	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.10-0.18	6.0-8.9	0.0-0.5	.32
	35-43	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.06-0.18	6.0-8.9	0.0-0.5	.32
	43-50	---	--	---	1.85-2.00	1.41-4.23	---	---	---	---
	0-2	55-69-70	16	10-15-20	1.30-1.60	4.23-14.11	0.15-0.20	0.0-2.9	0.5-2.0	.43
	2-9	55-57-70	30	7-14-20	1.45-1.75	1.41-14.11	0.10-0.20	3.0-5.9	0.5-1.0	.37
	9-35	5- 5-15	45	40-50-60	1.35-1.60	0.42-1.41	0.10-0.18	6.0-8.9	0.0-0.5	.32

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
74: Nashoba	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
	0-4	60-70-75	16	10-14-18	1.30-1.55	14.11-42.34	0.07-0.17	0.0-2.9	0.5-2.0	.20
	4-28	60-72-75	16	7-12-18	1.40-1.70	14.11-42.34	0.02-0.12	0.0-2.9	0.0-0.5	.17
	28-53	60-70-75	16	7-14-20	1.30-1.55	14.11-42.34	0.07-0.17	0.0-2.9	0.0-1.0	.28
	53-55	---	--	---	---	0.07-4.23	0.00-0.00	---	---	---
75: Sherless	0-5	55-68-75	21	7-12-18	1.20-1.40	14.11-42.34	0.11-0.13	0.0-2.9	0.5-2.0	.20
	5-8	55-68-75	21	8-12-15	1.50-1.55	14.11-42.34	0.11-0.13	0.0-2.9	0.5-1.0	.28
	8-17	40-70-75	16	10-14-18	1.45-1.55	14.11-42.34	0.11-0.18	0.0-2.9	0.5-1.0	.28
	17-27	40-60-65	18	20-22-35	1.40-1.50	4.23-14.11	0.12-0.18	0.0-2.9	0.0-0.5	.28
	27-39	50-55-65	18	20-28-35	1.25-1.50	4.23-14.11	0.11-0.18	6.0-8.9	0.0-0.5	.32
Nashoba	39-45	---	--	---	---	1.41-14.11	0.00-0.00	---	---	---
	0-4	60-70-75	16	10-14-18	1.30-1.50	14.11-42.34	0.11-0.17	0.0-2.9	0.5-2.0	.32
	4-28	60-72-75	16	7-12-18	1.40-1.70	14.11-42.34	0.02-0.12	0.0-2.9	0.0-0.5	.17
	28-53	60-70-75	16	7-14-20	1.30-1.55	14.11-42.34	0.07-0.17	0.0-2.9	0.0-1.0	.28
	53-55	---	--	---	---	0.07-4.23	0.00-0.00	---	---	---
76: Smithton	0-3	55-63-70	26	5-12-18	1.40-1.55	4.23-14.11	0.13-0.20	0.0-2.9	1.0-3.0	.32
	3-9	40-68-80	21	5-12-18	1.40-1.55	4.23-14.11	0.10-0.20	0.0-2.9	0.5-2.0	.32
	9-23	40-60-65	30	8-10-20	1.40-1.55	1.41-4.23	0.11-0.20	0.0-2.9	0.5-1.0	.32
	23-41	40-67-70	14	8-19-30	1.35-1.55	1.41-4.23	0.11-0.20	0.0-2.9	0.5-1.0	.37
	41-51	15-41-65	31	10-28-35	1.20-1.40	1.41-4.23	0.11-0.20	3.0-5.9	0.0-0.5	.32
77: Speer	51-80	15-40-65	32	8-28-35	1.20-1.40	1.41-4.23	0.11-0.20	3.0-5.9	0.0-0.5	.32
	0-3	55-69-70	16	12-15-18	1.30-1.60	4.23-14.11	0.11-0.15	0.0-2.9	0.5-2.0	.24
	3-13	45-67-70	14	7-18-20	1.40-1.65	4.23-14.11	0.11-0.20	0.0-2.9	0.5-1.0	.32
	13-34	35-38-60	36	7-25-27	1.40-1.70	4.23-14.11	0.12-0.20	0.0-2.9	0.2-0.8	.28
	34-80	35-43-50	40	7-17-27	1.20-1.40	4.23-14.11	0.12-0.20	0.0-2.9	0.0-0.5	.28
78: Speer	0-3	55-69-70	16	12-15-18	1.30-1.60	4.23-14.11	0.11-0.15	0.0-2.9	0.5-2.0	.24
	3-13	45-67-70	14	7-18-20	1.40-1.65	4.23-14.11	0.11-0.20	0.0-2.9	0.5-1.0	.32
	13-34	35-38-60	36	7-25-27	1.40-1.70	4.23-14.11	0.12-0.20	0.0-2.9	0.2-0.8	.28
	34-80	35-43-50	40	7-17-27	1.20-1.40	4.23-14.11	0.12-0.20	0.0-2.9	0.0-0.5	.28
79, 80: Stelltown	0-6	60-70-75	24	1- 6- 8	1.25-1.35	4.23-42.34	0.08-0.16	0.0-2.9	2.0-5.0	.20
	6-11	45-67-70	27	1- 5-18	1.55-1.65	4.23-14.11	0.13-0.16	0.0-2.9	0.5-2.0	.32
	11-27	45-60-65	26	5-14-27	1.55-1.65	4.23-14.11	0.13-0.16	0.0-2.9	0.2-0.8	.32
	27-42	45-53-65	27	8-20-27	1.35-1.60	4.23-14.11	0.11-0.15	0.0-2.9	0.0-0.5	.32
	42-80	45-55-65	23	15-22-35	1.20-1.40	4.23-14.11	0.11-0.15	0.0-2.9	0.0-0.5	.32

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
	In	Pct	Pct	Pct	g/cc		In/in	Pct	Pct	Kw
81, 82, 83: Tiak-----	0-6	55-63-70	23	10-14-18	1.30-1.50	4.23-14.11	0.09-0.12	0.0-2.9	1.0-3.0	.28
	6-19	5- 6-30	47	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	3.0-5.9	0.5-1.0	.32
	19-27	5-23-30	29	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	6.0-8.9	0.2-0.8	.32
	27-40	5-23-30	29	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	6.0-8.9	0.0-0.5	.32
	40-80	5-23-30	29	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	6.0-8.9	0.0-0.0	.32
84, 85: Tiak-----	0-6	55-63-70	23	10-14-18	1.30-1.50	4.23-14.11	0.09-0.12	0.0-2.9	1.0-3.0	.28
	6-19	5- 6-30	47	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	3.0-5.9	0.5-1.0	.32
	19-27	5-23-30	29	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	6.0-8.9	0.2-0.8	.32
	27-40	5-23-30	29	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	6.0-8.9	0.0-0.5	.32
	40-80	5-23-30	29	35-48-60	1.25-1.40	0.42-1.41	0.15-0.18	6.0-8.9	0.0-0.0	.32
Antoine-----	0-3	25-38-40	51	8-11-18	1.20-1.40	4.23-14.11	0.15-0.20	0.0-2.9	1.0-3.0	.37
	3-9	25-32-40	50	12-18-25	1.35-1.60	4.23-14.11	0.15-0.20	0.0-2.9	1.0-3.0	.37
	9-23	15-29-40	49	20-22-35	1.35-1.55	1.41-4.23	0.15-0.20	3.0-5.9	1.0-1.5	.32
	23-35	15-27-40	47	20-27-35	1.15-1.50	0.42-1.41	0.14-0.20	6.0-8.9	0.5-1.0	.32
	35-47	15-24-30	52	20-24-35	1.20-1.40	0.42-1.41	0.14-0.20	6.0-8.9	0.0-0.5	.32
86, 87: Toine-----	47-80	20-24-40	49	20-27-35	1.20-1.40	0.42-1.41	0.14-0.20	6.0-8.9	0.0-0.5	.32
	0-11	60-71-75	17	5-12-20	1.20-1.40	4.23-14.11	0.11-0.15	0.0-2.9	1.0-3.0	.24
	11-18	40-46-60	42	5-12-20	1.20-1.40	4.23-14.11	0.11-0.15	0.0-2.9	0.5-2.0	.24
	18-50	30-46-60	33	12-21-30	1.40-1.50	4.23-14.11	0.11-0.15	0.0-2.9	0.0-0.5	.24
	50-80	30-67-70	17	10-16-30	1.35-1.50	4.23-14.11	0.11-0.22	0.0-2.9	0.0-0.5	.24
88: Una-----	0-6	5-18-20	49	27-34-40	1.40-1.60	0.00-0.42	0.15-0.20	6.0-8.9	1.0-3.0	.32
	6-16	5- 5-15	45	40-50-60	1.00-1.20	0.00-0.42	0.15-0.20	6.0-8.9	0.5-2.0	.32
	16-44	5- 5-15	45	40-50-60	1.00-1.20	0.00-0.42	0.15-0.20	6.0-8.9	0.2-0.8	.32
	44-80	5- 8-15	51	28-42-55	1.40-1.60	0.00-0.42	0.15-0.20	6.0-8.9	0.0-0.5	.28
	0-3	60-70-75	24	2- 6-12	1.20-1.40	14.11-42.32	0.08-0.16	0.0-2.9	2.0-4.0	.17
89: Vaughn-----	3-10	60-69-80	24	5- 7-18	1.20-1.40	14.11-42.32	0.08-0.16	0.0-2.9	0.5-1.5	.24
	10-27	45-54-70	33	8-13-18	1.20-1.40	14.11-42.32	0.08-0.16	0.0-2.9	0.2-0.8	.24
	27-80	60-77-80	10	8-12-18	1.20-1.40	14.11-42.32	0.08-0.16	0.0-2.9	0.2-0.8	.24
	0-3	60-70-75	24	2- 6-12	1.20-1.40	14.11-42.32	0.08-0.16	0.0-2.9	2.0-4.0	.17
	3-10	60-69-80	24	5- 7-18	1.20-1.40	14.11-42.32	0.08-0.16	0.0-2.9	0.5-1.5	.24
90: Vaughn-----	10-27	45-54-70	33	8-13-18	1.20-1.40	14.11-42.32	0.08-0.16	0.0-2.9	0.2-0.8	.24
	27-80	60-77-80	10	8-12-18	1.20-1.40	14.11-42.32	0.08-0.16	0.0-2.9	0.2-0.8	.24
	0-3	60-70-75	24	2- 6-12	1.20-1.40	14.11-42.32	0.08-0.16	0.0-2.9	2.0-4.0	.17
	3-10	60-69-80	24	5- 7-18	1.20-1.40	14.11-42.32	0.08-0.16	0.0-2.9	0.5-1.5	.24
	10-27	45-54-70	33	8-13-18	1.20-1.40	14.11-42.32	0.08-0.16	0.0-2.9	0.2-0.8	.24

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability		Available water capacity	Linear extensi- bility	Organic matter	Erosion
						Pct	µm/sec				
In	Pct	Pct	g/cc	In/in	Pct	Pct					
90: Pikecreek-----	0-4	75-81-90	9	5-10-15	1.20-1.40	42.34-141.14	10.02-0.16	0.0-2.9	0.5-2.0	.17	
	4-33	75-84-95	9	2- 7-12	1.20-1.40	42.34-141.14	10.02-0.16	0.0-2.9	0.5-1.0	.28	
	33-80	75-89-95	4	2- 7-12	1.40-1.70	42.34-141.14	10.02-0.16	0.0-2.9	0.0-0.5	.28	
91: Water.											
92: Wetsaw-----	0-2	60-71-75	17	7-12-20	1.30-1.60	4.23-14.11	0.08-0.18	0.0-2.9	0.5-2.0	.24	
	2-6	35-68-70	22	7-10-20	1.35-1.55	4.23-14.11	0.08-0.18	0.0-2.9	0.5-1.0	.24	
	6-18	35-37-60	46	7-17-27	1.40-1.65	4.23-14.11	0.08-0.18	0.0-2.9	0.0-0.5	.32	
	18-36	30-32-60	31	27-38-40	1.40-1.70	4.23-14.11	0.08-0.15	3.0-5.9	0.0-0.5	.32	
	36-80	5-16-20	51	27-34-40	1.35-1.60	0.42-1.41	0.10-0.18	6.0-8.9	0.0-0.5	.32	
93: Woodall-----	0-4	65-68-75	21	7-12-20	1.40-1.55	4.23-14.11	0.13-0.20	0.0-2.9	1.0-3.0	.32	
	4-9	55-68-75	21	7-12-20	1.40-1.55	4.23-14.11	0.10-0.20	0.0-2.9	0.5-1.0	.32	
	9-24	55-70-75	16	7-13-20	1.40-1.55	4.23-14.11	0.11-0.20	0.0-2.9	0.0-0.5	.32	
	24-38	55-67-75	14	7-19-20	1.35-1.55	4.23-14.11	0.11-0.20	0.0-2.9	0.0-0.5	.37	
	38-61	55-70-75	16	7-14-20	1.40-1.55	4.23-14.11	0.11-0.20	0.0-2.9	0.0-0.5	.32	
94: Woodall-----	0-4	65-68-75	21	7-12-20	1.40-1.55	4.23-14.11	0.13-0.20	0.0-2.9	1.0-3.0	.32	
	4-9	55-68-75	21	7-12-20	1.40-1.55	4.23-14.11	0.10-0.20	0.0-2.9	0.5-1.0	.32	
	9-24	55-70-75	16	8-13-18	1.40-1.55	4.23-14.11	0.11-0.20	0.0-2.9	0.0-0.5	.32	
	24-38	55-72-75	14	7-14-20	1.35-1.55	4.23-14.11	0.11-0.20	0.0-2.9	0.0-0.5	.37	
	38-61	55-70-75	16	7-14-20	1.40-1.55	4.23-14.11	0.11-0.20	0.0-2.9	0.0-0.5	.32	
95, 96: Yanush-----	0-5	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32	
	5-12	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32	
	12-19	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32	
	19-33	5-16-20	51	27-34-40	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32	
	33-80	5-16-20	51	27-34-40	1.45-1.70	4.23-14.11	0.05-0.11	3.0-5.9	0.0-0.5	.28	
97: Yanush-----	0-5	15-26-35	52	18-22-26	1.20-1.40	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32	
	5-12	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32	
	12-19	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32	
	19-33	5-16-20	51	27-34-40	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32	
	33-80	5-16-20	51	27-34-40	1.45-1.70	4.23-14.11	0.05-0.11	3.0-5.9	0.0-0.5	.28	

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Organic matter	Erosion
In	Pct	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
97: Avant-----	0-4	15-31-35	56	5-13-20	1.30-1.60	4.23-14.11	0.06-0.11	0.0-2.9	2.0-4.0	.24
	4-10	15-31-35	56	5-13-20	1.30-1.60	4.23-14.11	0.06-0.11	0.0-2.9	0.5-1.0	.24
	10-16	15-27-30	55	10-18-25	1.25-1.55	4.23-14.11	0.06-0.11	0.0-2.9	0.5-1.0	.24
	16-36	10-17-20	53	15-30-35	1.20-1.50	4.23-14.11	0.06-0.11	0.0-2.9	0.0-0.5	.20
	36-40	---	--	---	---	0.07-4.23	0.00-0.00	---	---	---
Bengal-----	0-3	15-30-35	55	10-15-20	1.30-1.60	4.23-14.11	0.06-0.11	0.0-2.9	0.5-2.0	.24
	3-6	15-30-35	55	12-15-22	1.30-1.60	4.23-14.11	0.11-0.16	0.0-2.9	0.5-2.0	.28
	6-13	5-18-20	46	27-36-40	1.35-1.55	1.41-14.11	0.13-0.17	3.0-5.9	0.5-1.0	.28
	13-31	2- 5-15	45	40-50-60	1.25-1.50	0.42-1.41	0.13-0.18	6.0-8.9	0.0-0.5	.32
	31-37	2- 5-15	45	40-50-60	1.25-1.50	0.42-1.41	0.13-0.18	6.0-8.9	0.0-0.5	.32
98: Yanush-----	37-40	---	--	---	---	0.00-1.41	---	---	---	---
	0-5	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	5-12	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	12-19	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	19-33	5-16-20	51	27-34-40	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
Avant-----	33-80	5-16-20	51	27-34-40	1.45-1.70	4.23-14.11	0.05-0.11	3.0-5.9	0.0-0.5	.28
	0-4	15-31-35	56	5-13-20	1.30-1.60	4.23-14.11	0.06-0.11	0.0-2.9	2.0-4.0	.24
	4-10	15-31-35	56	5-13-20	1.30-1.60	4.23-14.11	0.06-0.11	0.0-2.9	0.5-1.0	.24
	10-16	15-27-30	55	10-18-25	1.25-1.55	4.23-14.11	0.06-0.11	0.0-2.9	0.5-1.0	.24
	16-36	10-17-20	53	15-30-35	1.20-1.50	4.23-14.11	0.06-0.11	0.0-2.9	0.0-0.5	.20
Bengal-----	36-40	---	--	---	---	0.07-4.23	0.00-0.00	---	---	---
	0-3	15-30-35	55	10-15-20	1.20-1.40	4.23-14.11	0.11-0.16	0.0-2.9	0.5-2.0	.28
	3-6	15-30-35	55	12-15-22	1.30-1.60	4.23-14.11	0.11-0.16	0.0-2.9	0.5-2.0	.28
	6-13	5-18-20	46	27-36-40	1.35-1.55	1.41-14.11	0.13-0.17	3.0-5.9	0.5-1.0	.28
	13-31	2- 5-15	45	40-50-60	1.25-1.50	0.42-1.41	0.13-0.18	6.0-8.9	0.0-0.5	.32
99: Yanush-----	31-37	2- 5-15	45	40-50-60	1.25-1.50	0.42-1.41	0.13-0.18	6.0-8.9	0.0-0.5	.32
	37-40	---	--	---	---	0.00-1.41	---	---	---	---
	0-5	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	5-12	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	12-19	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
Bigfork-----	19-33	5-16-20	51	27-34-40	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	33-80	5-16-20	51	27-34-40	1.45-1.70	4.23-14.11	0.05-0.11	3.0-5.9	0.0-0.5	.28
	0-3	35-42-50	38	15-20-26	1.20-1.40	4.23-14.11	0.02-0.11	3.0-5.9	0.5-7.0	.15
	3-7	10-38-45	40	15-22-28	1.45-1.70	4.23-14.11	0.02-0.11	3.0-5.9	0.0-0.5	.15
	7-25	10-18-40	51	27-31-35	1.45-1.70	4.23-14.11	0.05-0.14	3.0-5.9	0.0-0.5	.15
25-40	---	---	--	---	1.85-2.35	0.00-0.07	---	---	---	---

Table 17.--Physical Soil Properties--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability $\mu\text{m}/\text{sec}$	Available water capacity	Linear extensi- bility	Erosion	
									Organic matter	Kw
100: Yanush-----	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
	0-5	15-26-35	59	10-15-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	5-12	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	12-19	15-26-35	52	18-22-26	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	19-33	5-16-20	51	27-34-40	1.30-1.55	4.23-14.11	0.08-0.17	0.0-2.9	0.5-2.0	.32
	33-80	5-16-20	51	27-34-40	1.45-1.70	4.23-14.11	0.05-0.11	3.0-5.9	0.0-0.5	.28
Bigfork-----	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
	0-3	35-42-50	38	15-20-26	1.20-1.40	4.23-14.11	0.02-0.11	3.0-5.9	0.5-7.0	.15
	3-7	10-38-45	40	15-22-28	1.45-1.70	4.23-14.11	0.02-0.11	3.0-5.9	0.0-0.5	.15
	7-25	10-18-40	51	27-31-35	1.45-1.70	4.23-14.11	0.05-0.14	3.0-5.9	0.0-0.5	.15
	25-40	---	--	---	1.85-2.35	0.00-0.07	---	---	---	---
101: Zafra-----	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
	0-2	60-70-75	16	7-13-20	1.30-1.60	14.11-42.34	0.03-0.12	0.0-2.9	0.5-2.0	.24
	2-4	60-67-75	20	7-13-20	1.30-1.60	14.11-42.34	0.03-0.12	0.0-2.9	0.5-1.5	.24
	4-9	45-68-75	14	7-18-20	1.40-1.65	4.23-14.11	0.10-0.18	0.0-2.9	0.0-0.5	.32
	9-14	30-38-60	36	7-25-27	1.40-1.70	4.23-14.11	0.02-0.13	0.0-2.9	0.0-0.5	.24
	14-26	30-39-60	27	7-34-40	1.40-1.65	4.23-14.11	0.10-0.18	0.0-2.9	0.0-0.5	.32
Carnasaw-----	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
	26-38	30-36-60	31	10-34-40	1.40-1.70	4.23-14.11	0.02-0.13	0.0-2.9	0.0-0.5	.24
	38-42	---	--	---	---	1.41-14.11	---	---	---	---
	42-43	---	--	---	---	1.41-14.11	---	---	---	---
	0-3	55-66-75	21	7-14-20	1.30-1.60	14.11-42.34	0.10-0.16	0.0-2.9	0.5-2.0	.17
	3-10	55-68-75	14	7-18-20	1.45-1.70	1.41-4.23	0.10-0.19	6.0-8.9	0.0-0.5	.37
Clebit-----	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
	10-40	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.10-0.15	6.0-8.9	0.0-0.5	.24
	40-58	2- 3-10	44	40-52-60	1.35-1.60	0.42-1.41	0.08-0.12	6.0-8.9	0.0-0.5	.17
	58-60	---	--	---	1.85-2.00	0.00-1.41	---	---	---	---
	0-4	55-69-70	16	10-15-20	1.30-1.60	14.11-42.34	0.05-0.10	0.0-2.9	0.5-1.0	.15
	4-12	40-44-70	41	10-15-20	1.30-1.60	14.00-42.00	0.04-0.10	0.0-2.9	0.0-0.5	.15
	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
	12-16	55-70-75	16	7-14-20	1.30-1.60	14.00-42.00	0.04-0.10	0.0-2.9	0.0-0.5	.15
	In	Pct	Pct	Pct	g/cc	$\mu\text{m}/\text{sec}$	In/in	Pct	Pct	
	16-17	---	--	---	---	1.41-14.11	---	---	---	---

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties

[Absence of an entry indicates that data were not estimated]

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	
1:						
Antoine-----	0-3	---	1.0-4.0	4.5-5.5	0	0
	3-9	---	1.0-4.0	4.5-5.5	0	0
	9-23	---	2.0-6.0	4.5-5.5	0	0
	23-35	---	4.0-8.0	4.5-5.5	0	0
	35-47	---	4.0-8.0	4.5-5.5	0	0
	47-80	---	4.0-8.0	4.5-5.5	0	0
2:						
Avilla-----	0-4	3.6-7.3	---	5.1-6.5	0	0
	4-9	---	1.4-5.3	4.5-5.5	0	0
	9-16	---	1.2-5.3	4.5-5.5	0	0
	16-34	---	1.2-7.8	4.5-5.5	0	0
	34-44	---	1.2-7.8	4.5-5.5	0	0
	44-61	---	1.2-7.8	4.5-5.5	0	0
3:						
Avilla-----	0-4	5.0-15	---	5.1-6.5	0	0
	4-9	---	1.4-5.3	4.5-5.5	0	0
	9-16	---	1.2-5.3	4.5-5.5	0	0
	16-34	---	1.2-7.8	4.5-5.5	0	0
	34-44	---	1.2-7.8	4.5-5.5	0	0
	44-61	---	1.2-7.8	4.5-5.5	0	0
4:						
Avilla-----	0-4	5.0-15	---	5.1-6.5	0	0
	4-9	---	1.4-5.3	4.5-5.5	0	0
	9-16	---	1.2-5.3	4.5-5.5	0	0
	16-34	---	1.2-7.8	4.5-5.5	0	0
	34-44	---	1.2-7.8	4.5-5.5	0	0
	44-61	---	1.2-7.8	4.5-5.5	0	0
5:						
Bengal-----	0-3	---	2.1-4.3	4.5-6.0	0	0
	3-6	---	---	4.5-6.0	0	0
	6-13	---	5.1-8.0	4.5-5.5	0	0
	13-31	---	8.0-15	4.5-5.5	0	0
	31-37	---	8.0-15	4.5-5.5	0	0
	37-40	---	---	---	0	0
Bismarck-----	0-6	---	2.0-5.0	4.5-6.0	0	0
	6-16	---	2.0-5.0	4.5-6.0	0	0
	16-20	---	---	---	0	0
Yanush-----	0-5	10-15	---	5.6-6.5	0	0
	5-12	10-15	---	5.6-6.5	0	0
	12-19	10-15	---	5.6-6.5	0	0
	19-33	10-20	---	5.6-6.5	0	0
	33-80	---	10-20	4.5-6.0	0	0
6:						
Bengal-----	0-3	---	2.1-4.3	4.5-6.0	0	0
	3-6	---	---	4.5-6.0	0	0
	6-13	---	5.1-8.0	4.5-5.5	0	0
	13-31	---	8.0-15	4.5-5.5	0	0
	31-37	---	8.0-15	4.5-5.5	0	0
	37-40	---	---	---	0	0

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	
6:						
Bismarck-----	0-6	---	2.0-5.0	4.5-6.0	0	0
	6-16	---	2.0-5.0	4.5-6.0	0	0
	16-20	---	---	---	0	0
Yanush-----	0-5	10-15	---	5.6-6.5	0	0
	5-12	10-15	---	5.6-6.5	0	0
	12-19	10-15	---	5.6-6.5	0	0
	19-33	10-20	---	5.6-6.5	0	0
	33-80	---	10-20	4.5-6.0	0	0
7:						
Bengal-----	0-3	---	2.0-5.0	4.5-6.0	0	0
	3-6	---	8.0-15	4.5-6.0	0	0
	6-13	---	5.0-10	4.5-5.5	0	0
	13-31	---	8.0-15	4.5-5.5	0	0
	31-37	---	8.0-15	4.5-5.5	0	0
	37-40	---	---	---	0	0
Bismarck-----	0-6	---	2.0-5.0	4.5-6.0	0	0
	6-16	---	2.0-5.0	4.5-6.0	0	0
	16-20	---	---	---	0	0
Bigfork-----	0-3	---	2.0-5.0	5.0-6.0	0	0
	3-7	---	5.0-10	4.5-6.0	0	0
	7-25	---	5.0-10	4.5-6.0	0	0
	25-40	---	---	---	0	0
8:						
Bigfork-----	0-3	5.0-10	---	5.1-6.5	0	0
	3-7	---	5.0-10	4.5-6.0	0	0
	7-25	---	5.0-10	4.5-6.0	0	0
	25-40	---	---	---	0	0
Rock outcrop.						
9:						
Bigfork-----	0-3	---	2.0-5.0	4.5-6.0	0	0
	3-7	---	5.0-10	4.5-6.0	0	0
	7-25	---	5.0-10	4.5-6.0	0	0
	25-40	---	---	---	0	0
Yanush-----	0-5	5.0-15	---	5.6-6.5	0	0
	5-12	10-15	---	5.6-6.5	0	0
	12-19	10-15	---	5.6-6.5	0	0
	19-33	10-20	---	5.6-6.5	0	0
	33-80	---	10-20	4.5-6.0	0	0
Rock outcrop.						
10, 11:						
Billstown-----	0-7	---	5.0-15	4.5-5.5	0	0
	7-13	---	5.0-15	4.5-5.5	0	0
	13-22	---	25-45	4.5-5.5	0	0
	22-32	---	25-45	4.5-5.5	0	0
	32-49	---	25-45	4.5-5.5	0	0
	49-64	35-50	---	6.5-8.2	0	0
	64-80	30-40	---	6.5-8.2	0	0

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	
12:						
Billstown-----	0-7	---	5.0-15	4.5-5.5	0	0
	7-13	---	5.0-15	4.5-5.5	0	0
	13-22	---	25-45	4.5-5.5	0	0
	22-32	---	25-45	4.5-5.5	0	0
	32-49	---	25-45	4.5-5.5	0	0
	49-64	35-50	---	6.5-8.2	0	0
	64-80	30-40	---	6.5-8.2	0	0
Tiak-----	0-6	---	2.0-5.0	4.5-6.0	0	0
	6-19	---	10-25	4.5-5.5	0	0
	19-27	---	10-25	4.0-5.5	0	0
	27-40	---	10-35	4.0-5.5	0	0
	40-80	---	15-35	4.0-5.5	0	0
13:						
Bonnerdale-----	0-3	---	5.0-15	3.6-5.5	0	0
	3-13	---	3.0-15	3.6-5.5	0	0
	13-24	---	3.0-15	3.6-5.5	0	0
	24-35	---	5.0-30	3.6-5.5	0	0
	35-43	---	10-45	3.6-5.5	0	0
	43-54	---	10-45	3.6-5.5	0	0
	54-60	---	---	---	---	---
14:						
Carnasaw-----	0-3	---	9.0-16	4.5-6.0	0	0
	3-10	---	21-27	4.5-5.5	0	0
	10-40	---	27-41	4.5-5.5	0	0
	40-58	---	27-41	4.5-5.5	0	0
	58-60	---	---	---	0	0
Pirum-----	0-3	---	2.0-5.0	4.5-5.5	0	0
	3-7	---	2.0-10	4.5-5.5	0	0
	7-16	---	2.0-10	4.5-5.5	0	0
	16-26	---	5.0-10	4.5-5.5	0	0
	26-40	---	5.0-10	4.5-5.5	0	0
	40-42	---	---	---	---	---
15:						
Carnasaw-----	0-3	---	12-18	4.5-6.0	0	0
	3-10	---	21-27	4.5-5.5	0	0
	10-40	---	27-41	4.5-5.5	0	0
	40-58	---	27-41	4.5-5.5	0	0
	58-60	---	---	---	0	0
Sherless-----	0-5	---	1.0-5.0	3.6-5.5	0	0
	5-8	---	1.0-10	3.6-5.5	0	0
	8-17	---	1.0-5.0	3.6-5.5	0	0
	17-27	---	2.0-10	3.6-5.5	0	0
	27-39	---	2.0-10	3.6-5.5	0	0
	39-45	---	---	---	0	0
16:						
Carnasaw-----	0-3	---	9.0-16	4.5-6.0	0	0
	3-10	---	21-27	4.5-5.5	0	0
	10-40	---	27-41	4.5-5.5	0	0
	40-58	---	27-41	4.5-5.5	0	0
	58-60	---	---	---	0	0

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	
16:						
Sherless-----	0-5	---	1.0-5.0	3.6-5.5	0	0
	5-8	---	1.0-10	3.6-5.5	0	0
	8-17	---	1.0-5.0	3.6-5.5	0	0
	17-27	---	2.0-10	3.6-5.5	0	0
	27-39	---	2.0-10	3.6-5.5	0	0
	39-45	---	---	---	0	0
17:						
Carnasaw-----	0-3	---	12-18	4.5-6.0	0	0
	3-10	---	21-27	4.5-5.5	0	0
	10-40	---	27-41	4.5-5.5	0	0
	40-58	---	27-41	4.5-5.5	0	0
	58-60	---	---	---	0	0
Sherwood-----	0-4	---	1.0-5.0	4.5-6.0	0	0
	4-13	---	2.0-10	4.5-6.0	0	0
	13-42	---	2.0-10	4.5-5.5	0	0
	42-45	---	2.0-10	4.5-5.5	0	0
	45-50	---	---	---	0	0
	50-60	---	---	---	---	0
Zafra-----	0-2	2.6-7.3	---	5.1-6.0	0	0
	2-4	2.6-7.3	---	5.1-6.0	0	0
	4-9	---	1.3-4.7	4.5-5.0	0	0
	9-14	---	1.3-6.4	4.5-5.0	0	0
	14-26	---	5.3-9.7	4.5-5.0	0	0
	26-38	---	5.3-9.7	4.5-5.0	0	0
	38-42	---	---	---	0	0
	42-43	---	---	---	0	0
18:						
Carnasaw-----	0-3	---	8.0-15	4.5-6.0	0	0
	3-10	---	21-27	4.5-5.5	0	0
	10-40	---	27-41	4.5-5.5	0	0
	40-58	---	27-41	4.5-5.5	0	0
	58-60	---	---	---	0	0
Zafra-----	0-2	2.6-7.3	---	5.1-6.0	0	0
	2-4	2.6-7.3	---	5.1-6.0	0	0
	4-9	---	1.3-4.7	4.5-5.0	0	0
	9-14	---	1.3-6.4	4.5-5.0	0	0
	14-26	---	5.3-9.7	4.5-5.0	0	0
	26-38	---	5.3-9.7	4.5-5.0	0	0
	38-42	---	---	---	0	0
	42-43	---	---	---	0	0
Clebit-----	0-4	2.0-10	---	4.5-6.5	0	0
	4-12	2.0-10	---	4.5-6.5	0	0
	12-16	2.0-10	---	4.5-6.5	0	0
	16-17	---	---	---	0	0
19, 20:						
Ceda-----	0-12	2.0-10	---	5.6-6.5	0	0
	12-22	2.0-10	---	5.6-6.5	0	0
	22-55	2.0-10	---	5.6-6.5	0	0
	55-80	2.0-10	---	5.6-6.5	0	0

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	
21:						
Clebit-----	0-4	2.0-10	---	4.5-6.5	0	0
	4-12	2.0-10	---	4.5-6.5	0	0
	12-16	2.0-10	---	4.5-6.5	0	0
	16-17	---	---	---	0	0
Carnasaw-----	0-3	---	7.0-16	4.5-6.0	0	0
	3-10	---	21-27	4.5-5.5	0	0
	10-40	---	27-41	4.5-5.5	0	0
	40-58	---	27-41	4.5-5.5	0	0
	58-60	---	---	---	0	0
Pirum-----	0-3	---	2.0-5.0	4.5-5.5	0	0
	3-7	---	2.0-10	4.5-5.5	0	0
	7-16	---	2.0-10	4.5-5.5	0	0
	16-26	---	5.0-10	4.5-5.5	0	0
	26-40	---	5.0-10	4.5-5.5	0	0
	40-42	---	---	---	---	---
22:						
Cupco-----	0-2	8.0-15	---	4.5-6.5	0	0
	2-25	8.0-15	---	4.5-6.5	0	0
	25-41	12-20	---	4.5-6.5	0	0
	41-62	12-20	---	4.5-6.5	0	0
	62-80	12-20	---	5.1-7.3	0	0
23:						
Dam.						
24, 25:						
Dela-----	0-3	4.0-10	---	5.1-7.3	0	0
	3-8	4.0-10	---	5.1-7.3	0	0
	8-45	4.0-10	---	5.1-7.3	0	0
	45-51	4.0-10	---	5.1-7.3	0	0
	51-80	4.0-10	---	5.1-7.3	0	0
26:						
Delight-----	0-4	30-45	---	6.5-8.2	0	0
	4-8	30-45	---	6.5-8.2	0	0
	8-12	30-45	---	6.5-8.2	0	0
	12-20	30-45	---	6.5-8.2	0	0
	20-29	30-45	---	6.5-8.2	0	0
	29-41	25-45	---	6.5-8.2	0	0
	41-70	25-45	---	6.5-8.2	0	0
	70-84	25-45	---	6.5-8.2	0	0
27:						
Gurdon-----	0-2	1.0-5.0	---	5.1-6.0	0	0
	2-7	---	1.0-5.0	4.5-6.0	0	0
	7-21	---	1.0-5.0	4.5-6.0	0	0
	21-38	---	2.0-10	4.5-6.0	0	0
	38-80	---	2.0-10	4.5-6.0	0	0
28, 29, 30:						
Guyton-----	0-5	3.0-15	---	5.1-6.0	0	0
	5-15	3.0-15	---	4.5-6.0	0-5	0
	15-40	10-20	---	4.5-8.4	0-5	0-10
	40-80	10-20	---	4.5-8.4	0-5	0-10

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	
31:						
Japany-----	0-6	20-35	---	6.0-6.5	0	0
	6-12	20-35	---	5.0-6.0	0	0
	12-22	25-45	---	5.0-6.0	0	0
	22-37	25-45	---	5.0-6.5	0	0
	37-55	25-45	---	6.0-7.5	0	0
	55-80	25-45	---	6.5-8.2	0	0
32:						
Kenn-----	0-6	5.0-10	---	5.1-6.5	0	0
	6-12	5.0-10	---	5.1-6.5	0	0
	12-28	---	8.0-12	4.5-5.5	0	0
	28-42	---	8.0-12	4.5-5.5	0	0
	42-80	---	8.0-12	4.5-5.5	0	0
33, 34:						
Kenn-----	0-6	5.0-10	---	5.1-6.5	0	0
	6-12	5.0-10	---	5.1-6.5	0	0
	12-28	---	8.0-12	4.5-5.5	0	0
	28-42	---	8.0-12	4.5-5.5	0	0
	42-80	---	8.0-12	4.5-5.5	0	0
35:						
Kenn-----	0-6	5.0-10	---	5.1-6.5	0	0
	6-12	5.0-10	---	5.1-6.5	0	0
	12-28	---	8.0-12	4.5-5.5	0	0
	28-42	---	8.0-12	4.5-5.5	0	0
	42-80	---	8.0-12	4.5-5.5	0	0
Ceda-----	0-12	2.0-10	---	5.6-6.5	0	0
	12-22	2.0-10	---	5.6-6.5	0	0
	22-55	2.0-10	---	5.6-6.5	0	0
	55-80	2.0-10	---	5.6-6.5	0	0
36:						
Kizzia-----	0-4	1.0-5.0	---	5.5-6.5	0	0
	4-7	1.0-5.0	---	6.0-7.0	0	0
	7-12	5.0-12	---	6.0-7.0	0	0
	12-36	---	2.0-10	5.0-5.5	0	0
	36-80	---	2.0-10	5.0-5.5	0	0
37:						
Leeper-----	0-3	20-35	---	5.6-8.4	0	0
	3-10	20-45	---	5.6-8.4	0	0
	10-51	25-45	---	5.6-8.4	0	0
	51-95	25-40	---	5.6-8.4	0	0
38:						
Littlefir-----	0-2	---	1.0-5.0	4.5-6.0	0	0
	2-9	---	8.0-15	4.5-5.5	0	0
	9-35	---	8.0-15	4.5-5.5	0	0
	35-43	---	8.0-15	4.5-5.5	0	0
	43-50	---	---	---	0	0
Carnasaw-----	0-3	---	5.0-15	4.5-6.0	0	0
	3-10	---	21-27	4.5-5.5	0	0
	10-40	---	27-41	4.5-5.5	0	0
	40-58	---	27-41	4.5-5.5	0	0
	58-60	---	---	---	0	0

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	
39:						
Magnet-----	0-8	5.0-20	---	5.1-6.5	0	0
	8-23	20-45	---	5.1-6.5	0	0
	23-31	20-45	---	5.1-6.5	0	0
	31-72	---	---	---	0	0
40:						
Marietta-----	0-16	5.0-15	---	5.6-7.8	0	0
	16-29	15-25	---	5.6-7.8	0	0
	29-57	15-25	---	5.6-7.8	0	0
	57-72	15-25	---	5.6-7.8	0	0
	72-85	5.0-15	---	5.6-7.8	0	0
41, 42:						
Mazarn-----	0-4	---	1.0-5.0	4.5-5.5	0	0
	4-10	---	1.0-5.0	4.5-5.5	0	0
	10-21	---	2.0-8.0	4.5-5.5	0	0
	21-36	---	2.0-8.0	4.5-5.5	0	0
	36-40	---	---	---	---	---
43:						
McCaskill-----	0-4	---	1.0-5.0	4.5-5.5	0	0
	4-13	---	1.0-10	4.5-5.5	0	0
	13-23	---	1.0-10	4.5-5.5	0	0
	23-37	---	1.0-10	4.0-5.0	0	0
	37-61	---	1.0-10	4.0-5.0	0	0
	61-80	---	1.0-10	4.0-5.0	0	0
44, 45, 46:						
Mena-----	0-5	---	1.0-5.0	4.5-6.0	0	0
	5-12	---	1.0-5.0	4.5-6.0	0	0
	12-19	---	1.0-8.0	4.5-6.0	0	0
	19-31	---	5.0-15	3.6-5.5	0	0
	31-62	---	5.0-15	3.6-5.5	0	0
	62-80	---	---	---	0	0
47, 48:						
Murfreesboro-----	0-6	5.0-10	---	5.1-6.5	0	0
	6-31	---	5.0-10	4.5-5.5	0	0
	31-42	---	5.0-10	4.5-5.5	0	0
	42-80	---	5.0-10	4.5-5.5	0	0
49:						
Nathan-----	0-7	1.0-4.0	---	5.0-6.0	0	0
	7-14	1.0-4.0	---	5.0-6.0	0	0
	14-19	1.0-4.0	---	5.0-6.0	0	0
	19-26	---	2.0-4.0	4.5-6.0	0	0
	26-35	---	2.0-4.0	4.5-5.5	0	0
	35-50	---	2.0-4.0	4.5-5.5	0	0
	50-80	---	2.0-4.0	4.5-5.5	0	0
50:						
Nashoba-----	0-4	2.0-8.0	---	5.1-6.0	0	0
	4-28	2.0-8.0	---	5.1-6.0	0	0
	28-53	---	1.0-5.0	4.5-6.0	0	0
	53-55	---	---	---	0	0
Bismarck-----	0-6	---	5.0-15	4.5-6.0	0	0
	6-16	---	2.0-5.0	4.5-6.0	0	0
	16-20	---	---	---	0	0

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	
50:						
Littlefir-----	0-2	---	1.0-5.0	4.5-5.5	0	0
	2-9	---	8.0-15	4.5-5.5	0	0
	9-35	---	8.0-15	4.5-5.5	0	0
	35-43	---	8.0-15	4.5-5.5	0	0
	43-50	---	---	---	0	0
51:						
Nashoba-----	0-4	2.0-8.0	---	5.1-6.0	0	0
	4-28	2.0-8.0	---	5.1-6.0	0	0
	28-53	---	1.0-4.0	4.5-6.0	0	0
	53-55	---	---	---	0	0
Bismarck-----	0-6	---	2.0-5.0	4.5-6.0	0	0
	6-16	---	2.0-5.0	4.5-6.0	0	0
	16-20	---	---	---	0	0
Littlefir-----	0-2	---	1.7-3.9	4.5-5.5	0	0
	2-9	---	8.0-15	4.5-5.5	0	0
	9-35	---	8.0-15	4.5-5.5	0	0
	35-43	---	8.0-15	4.5-5.5	0	0
	43-50	---	---	---	0	0
52:						
Nashoba-----	0-4	2.0-8.0	---	5.1-6.0	0	0
	4-28	2.0-8.0	---	5.1-6.0	0	0
	28-53	---	1.0-5.0	4.5-6.0	0	0
	53-55	---	---	---	0	0
Littlefir-----	0-2	---	1.0-5.0	4.5-6.0	0	0
	2-9	---	8.0-15	4.5-5.5	0	0
	9-35	---	8.0-15	4.5-5.5	0	0
	35-43	---	8.0-15	4.5-5.5	0	0
	43-50	---	---	---	0	0
Sherless-----	0-5	---	1.0-5.0	4.5-6.0	0	0
	5-8	---	1.0-10	3.6-5.5	0	0
	8-17	---	1.0-10	3.6-5.5	0	0
	17-27	---	2.0-10	3.6-5.5	0	0
	27-39	---	2.0-10	3.6-5.5	0	0
	39-45	---	---	---	0	0
53:						
Neff-----	0-2	---	2.0-10	4.5-6.0	0	0
	2-14	2.0-15	---	4.5-6.5	0	0
	14-26	2.0-15	---	4.5-6.5	0	0
	26-48	10-20	---	4.5-6.5	0	0
	48-80	10-20	---	4.5-6.5	0	0
54, 55, 56:						
Ochlockonee-----	0-4	2.0-10	---	4.5-6.5	0	0
	4-39	---	0.0-5.0	4.5-5.5	0	0
	39-55	---	0.0-5.0	4.5-5.5	0	0
	55-80	---	0.0-5.0	4.5-5.5	0	0
57, 58:						
Ouachita-----	0-9	---	1.0-5.0	4.5-6.0	0	0
	9-38	---	5.0-15	4.5-6.0	0	0
	38-52	---	5.0-15	4.5-6.0	0	0
	52-77	---	5.0-15	4.5-6.0	0	0
	77-88	---	5.0-15	4.5-5.5	0	0

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	
59, 60:						
Ozan-----	0-1	---	1.0-5.0	4.5-6.0	0	0
	1-7	---	1.0-5.0	4.5-6.0	0	0
	7-15	---	1.0-5.0	4.5-6.0	0	0
	15-24	---	1.0-5.0	4.5-6.0	0	0
	24-80	---	1.0-5.0	4.5-6.0	0	0
61:						
Peanutrock-----	0-4	---	1.0-5.0	4.5-5.5	0	0
	4-10	---	1.0-10	4.5-5.5	0	0
	10-33	---	1.0-10	4.5-5.5	0	0
	33-80	---	1.0-5.0	4.5-5.5	0	0
62, 63:						
Peanutrock-----	0-4	---	1.0-5.0	4.5-5.5	0	0
	4-10	---	1.0-10	4.5-5.5	0	0
	10-33	---	1.0-10	4.5-5.5	0	0
	33-80	---	1.0-5.0	4.5-5.5	0	0
64:						
Peanutrock-----	0-4	---	1.0-5.0	4.5-5.5	0	0
	4-10	---	1.0-10	4.5-5.5	0	0
	10-33	---	1.0-10	4.5-5.5	0	0
	33-80	---	1.0-5.0	4.5-5.5	0	0
Tiak-----	0-6	---	2.0-5.0	4.5-6.0	0	0
	6-19	---	10-25	4.5-5.5	0	0
	19-27	---	10-25	4.0-5.5	0	0
	27-40	---	10-35	4.0-5.5	0	0
	40-80	---	15-35	4.0-5.5	0	0
65:						
Pikecity-----	0-3	---	1.0-4.0	4.5-5.5	0	0
	3-6	---	1.0-4.0	4.5-5.5	0	0
	6-22	---	1.0-4.0	4.5-5.5	0	0
	22-31	---	1.0-4.0	4.5-5.5	0	0
	31-48	---	1.0-4.0	4.5-5.5	0	0
	48-80	---	1.0-4.0	4.5-5.5	0	0
66:						
Pikecreek-----	0-4	4.0-12	---	5.6-6.5	0	0
	4-20	1.8-9.1	---	5.6-6.5	0	0
	20-33	1.8-9.1	---	5.6-6.5	0	0
	33-80	1.4-8.6	---	5.6-6.5	0	0
67:						
Pirum-----	0-3	---	1.0-5.0	4.5-5.5	0	0
	3-7	---	2.0-10	4.5-5.5	0	0
	7-16	---	2.0-10	4.5-5.5	0	0
	16-26	---	4.0-10	4.5-5.5	0	0
	26-40	---	4.0-10	4.5-5.5	0	0
	40-42	---	---	---	---	---
Sherless-----	0-5	---	1.1-3.7	3.6-5.5	0	0
	5-8	---	1.4-2.9	3.6-5.5	0	0
	8-17	---	1.8-3.5	3.6-5.5	0	0
	17-27	---	3.9-8.4	3.6-5.5	0	0
	27-39	---	3.9-8.4	3.6-5.5	0	0
	39-45	---	---	---	0	0

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	
67: Bonnerdale-----	0-3	---	5.0-15	3.6-5.5	0	0
	3-13	---	3.0-15	3.6-5.5	0	0
	13-24	---	3.0-15	3.6-5.5	0	0
	24-35	---	5.0-30	3.6-5.5	0	0
	35-43	---	10-45	3.6-5.5	0	0
	43-54	---	10-45	3.6-5.5	0	0
	54-60	---	---	---	---	---
68: Pits. Udorthents.						
69: Riverwash.						
Ceda-----	0-12	2.0-10	---	5.6-6.5	0	0
	12-22	2.0-10	---	5.6-6.5	0	0
	22-55	2.0-10	---	5.6-6.5	0	0
	55-80	2.0-10	---	5.6-6.5	0	0
70, 71: Sardis-----	0-10	---	2.0-10	4.5-6.0	0	0
	10-20	---	2.0-10	4.5-6.0	0	0
	20-61	---	5.0-15	4.5-6.0	0	0
	61-73	---	5.0-15	4.5-6.0	0	0
	73-80	---	2.0-20	4.5-6.0	0	0
72: Sherless-----	0-5	---	1.0-5.0	3.6-5.5	0	0
	5-8	---	1.0-5.0	3.6-5.5	0	0
	8-17	---	1.0-5.0	3.6-5.5	0	0
	17-27	---	2.0-10	3.6-5.5	0	0
	27-39	---	2.0-10	3.6-5.5	0	0
	39-45	---	---	---	0	0
Littlefir-----	0-2	---	1.0-5.0	4.5-6.0	0	0
	2-9	---	8.0-15	4.5-5.5	0	0
	9-35	---	8.0-15	4.5-5.5	0	0
	35-43	---	8.0-15	4.5-5.5	0	0
	43-50	---	---	---	0	0
73, 74: Sherless-----	0-5	---	1.0-5.0	3.6-5.5	0	0
	5-8	---	1.0-10	3.6-5.5	0	0
	8-17	---	1.0-5.0	3.6-5.5	0	0
	17-27	---	2.0-10	3.6-5.5	0	0
	27-39	---	2.0-10	3.6-5.5	0	0
	39-45	---	---	---	0	0
Littlefir-----	0-2	---	1.0-5.0	4.5-6.0	0	0
	2-9	---	8.0-15	4.5-5.5	0	0
	9-35	---	8.0-15	4.5-5.5	0	0
	35-43	---	8.0-15	4.5-5.5	0	0
	43-50	---	---	---	0	0
Nashoba-----	0-4	2.0-8.0	---	5.1-6.0	0	0
	4-28	2.0-8.0	---	5.1-6.0	0	0
	28-53	---	1.0-5.0	4.5-6.0	0	0
	53-55	---	---	---	0	0

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	
75:						
Sherless-----	0-5	---	1.0-5.0	3.6-5.5	0	0
	5-8	---	1.0-10	3.6-5.5	0	0
	8-17	---	1.0-5.0	3.6-5.5	0	0
	17-27	---	2.0-10	3.6-5.5	0	0
	27-39	---	2.0-10	3.6-5.5	0	0
	39-45	---	---	---	0	0
Nashoba-----	0-4	2.0-8.0	---	5.1-6.0	0	0
	4-28	2.0-8.0	---	5.1-6.0	0	0
	28-53	---	1.0-5.0	4.5-6.0	0	0
	53-55	---	---	---	0	0
76:						
Smithton-----	0-3	---	1.0-5.0	4.5-5.5	0	0
	3-9	---	1.0-10	4.5-5.5	0	0
	9-23	---	1.0-10	4.5-5.5	0	0
	23-41	---	1.0-10	4.5-5.5	0	0
	41-51	---	1.0-10	4.5-5.5	0	0
	51-80	---	1.0-10	4.5-5.5	0	0
77, 78:						
Speer-----	0-3	5.0-10	---	5.1-7.3	0	0
	3-13	---	1.0-10	4.5-6.0	0	0
	13-34	---	1.0-10	4.5-6.0	0	0
	34-80	---	1.0-15	4.5-6.0	0	0
79:						
Stelltown-----	0-6	---	0.0-5.0	4.5-5.5	0	0
	6-11	---	0.0-5.0	4.5-5.5	0	0
	11-27	---	1.0-10	4.5-5.5	0	0
	27-42	---	1.0-10	4.5-5.5	0	0
	42-80	---	1.0-10	4.5-5.5	0	0
80:						
Stelltown-----	0-6	---	0.0-5.0	4.5-5.5	0	0
	6-11	---	0.0-5.0	4.5-5.5	0	0
	11-27	---	1.0-10	4.5-5.5	0	0
	27-42	---	1.0-10	4.5-5.5	0	0
	42-80	---	1.0-10	4.5-5.5	0	0
81:						
Tiak-----	0-6	---	2.0-5.0	4.5-6.0	0	0
	6-19	---	10-25	4.5-5.5	0	0
	19-27	---	10-25	4.0-5.5	0	0
	27-40	---	10-35	4.0-5.5	0	0
	40-80	---	15-35	4.0-5.5	0	0
82, 83:						
Tiak-----	0-6	---	2.0-10	4.5-6.0	0	0
	6-19	---	10-25	4.5-5.5	0	0
	19-27	---	10-25	4.0-5.5	0	0
	27-40	---	10-35	4.0-5.5	0	0
	40-80	---	15-35	4.0-5.5	0	0
84, 85:						
Tiak-----	0-6	---	2.0-10	4.5-6.0	0	0
	6-19	---	10-25	4.5-5.5	0	0
	19-27	---	10-25	4.0-5.5	0	0
	27-40	---	10-35	4.0-5.5	0	0
	40-80	---	15-35	4.0-5.5	0	0

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	
84, 85: Antoine-----	0-3	---	1.0-4.0	4.5-5.5	0	0
	3-9	---	1.0-4.0	4.5-5.5	0	0
	9-23	---	2.0-6.0	4.5-5.5	0	0
	23-35	---	4.0-8.0	4.5-5.5	0	0
	35-47	---	4.0-8.0	4.5-5.5	0	0
	47-80	---	4.0-8.0	4.5-5.5	0	0
86, 87: Toine-----	0-11	2.0-10	---	5.1-6.5	0	0
	11-18	2.0-10	---	5.1-6.5	0	0
	18-50	5.0-15	---	5.1-6.5	0	0
	50-80	---	5.0-15	4.5-5.5	0	0
88: Una-----	0-6	---	5.0-15	4.5-5.5	0	0
	6-16	---	10-25	4.5-5.5	0	0
	16-44	---	10-25	4.5-5.5	0	0
	44-80	---	10-30	4.5-5.5	0	0
89: Vaughn-----	0-3	1.0-5.0	---	5.0-6.0	0	0
	3-10	---	1.0-5.0	4.5-5.5	0	0
	10-27	---	1.4-3.6	4.5-5.5	0	0
	27-80	---	1.0-5.0	4.5-5.5	0	0
90: Vaughn-----	0-3	1.0-5.0	---	5.0-6.0	0	0
	3-10	---	1.0-5.0	4.5-5.5	0	0
	10-27	---	1.4-3.6	4.5-5.5	0	0
	27-80	---	1.0-5.0	4.5-5.5	0	0
Pikecreek-----	0-4	4.0-12	---	5.6-6.5	0	0
	4-33	1.8-9.1	---	5.6-6.5	0	0
	33-80	1.4-8.6	---	5.6-6.5	0	0
91: Water.						
92: Wetsaw-----	0-2	4.0-12	---	5.1-6.5	0	0
	2-6	4.0-10	---	5.1-6.5	0	0
	6-18	---	12-21	4.5-5.5	0	0
	18-36	---	12-33	4.5-5.5	0	0
	36-80	---	24-33	4.5-5.5	0	0
93, 94: Woodall-----	0-4	---	2.0-10	4.5-5.5	0	0
	4-9	---	2.0-10	4.5-5.5	0	0
	9-24	---	2.0-20	4.5-5.5	0	0
	24-38	---	5.0-25	4.5-5.5	0	0
	38-61	---	5.0-25	4.5-5.5	0	0
95, 96: Yanush-----	0-5	10-15	---	5.6-6.5	0	0
	5-12	10-15	---	5.6-6.5	0	0
	12-19	10-15	---	5.6-6.5	0	0
	19-33	10-20	---	5.6-6.5	0	0
	33-80	---	10-20	4.5-6.0	0	0

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	
97, 98:						
Yanush-----	0-5	10-15	---	5.6-6.5	0	0
	5-12	10-15	---	5.6-6.5	0	0
	12-19	10-15	---	5.6-6.5	0	0
	19-33	10-20	---	5.6-6.5	0	0
	33-80	---	10-20	4.5-6.0	0	0
Avant-----	0-4	---	1.0-5.0	4.5-6.0	0	0
	4-10	---	5.0-10	4.5-6.0	0	0
	10-16	---	5.0-10	4.5-6.0	0	0
	16-36	---	5.0-15	4.5-6.0	0	0
	36-40	---	---	---	---	---
Bengal-----	0-3	---	2.0-5.0	4.5-6.0	0	0
	3-6	---	5.0-15	4.5-6.0	0	0
	6-13	---	5.0-10	4.5-5.5	0	0
	13-31	---	8.0-15	4.5-5.5	0	0
	31-37	---	8.0-15	4.5-5.5	0	0
	37-40	---	---	---	0	0
99:						
Yanush-----	0-5	10-15	---	5.6-6.5	0	0
	5-12	10-15	---	5.6-6.5	0	0
	12-19	10-15	---	5.6-6.5	0	0
	19-33	10-20	---	5.6-6.5	0	0
	33-80	---	10-20	4.5-6.0	0	0
Bigfork-----	0-3	---	2.0-5.0	4.5-6.0	0	0
	3-7	---	5.0-10	4.5-6.0	0	0
	7-25	---	5.0-10	4.5-6.0	0	0
	25-40	---	---	---	0	0
100:						
Yanush-----	0-5	5.0-15	---	5.6-6.5	0	0
	5-12	10-15	---	5.6-6.5	0	0
	12-19	10-15	---	5.6-6.5	0	0
	19-33	10-20	---	5.6-6.5	0	0
	33-80	---	10-20	4.5-6.0	0	0
Bigfork-----	0-3	---	2.0-5.0	4.5-6.0	0	0
	3-7	---	5.0-10	4.5-6.0	0	0
	7-25	---	5.0-10	4.5-6.0	0	0
	25-40	---	---	---	0	0
101:						
Zafra-----	0-2	2.6-7.3	---	5.1-6.0	0	0
	2-4	2.6-7.3	---	5.1-6.0	0	0
	4-9	---	1.3-4.7	4.5-5.0	0	0
	9-14	---	1.3-6.4	4.5-5.0	0	0
	14-26	---	5.3-9.7	4.5-5.0	0	0
	26-38	---	5.3-9.7	4.5-5.0	0	0
	38-42	---	---	---	0	0
	42-43	---	---	---	0	0

Soil Survey of Pike County, Arkansas

Table 18.--Chemical Soil Properties--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Gypsum	Sodium adsorp- tion ratio
	<i>Inches</i>	<i>meq/100 g</i>	<i>meq/100 g</i>	<i>pH</i>	<i>Pct</i>	
101: Carnasaw-----	0-3	---	8.0-15	4.5-6.0	0	0
	3-10	---	21-27	4.5-5.5	0	0
	10-40	---	27-41	4.5-5.5	0	0
	40-58	---	27-41	4.5-5.5	0	0
	58-60	---	---	---	0	0
Clebit-----	0-4	2.0-10	---	4.5-6.5	0	0
	4-12	2.0-10	---	4.5-6.5	0	0
	12-16	2.0-10	---	4.5-6.5	0	0
	16-17	---	---	---	0	0

Soil Survey of Pike County, Arkansas

Table 19.--Soil Features

[See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated]

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		<i>In</i>				
1: Antoine-----	---	---	---	None	High	High
2: Avilla-----	---	---	---	None	Low	Moderate
3: Avilla.						
4: Avilla-----	---	---	---	None	Low	Moderate
5: Bengal-----	Paralithic bedrock	20-40	Weakly cemented	None	High	High
Bismarck-----	Paralithic bedrock	10-20	Weakly cemented	None	Moderate	Moderate
Yanush-----	---	---	---	None	Moderate	Moderate
6: Bengal-----	Paralithic bedrock	20-40	Weakly cemented	None	High	High
Bismarck-----	Paralithic bedrock	10-20	Weakly cemented	None	Moderate	Moderate
Yanush.						
7: Bengal-----	Paralithic bedrock	20-40	Weakly cemented	None	High	High
Bismarck-----	Paralithic bedrock	10-20	Weakly cemented	None	Moderate	Moderate
Bigfork-----	Lithic bedrock	20-40	Very strongly cemented	None	Moderate	High
8: Bigfork-----	Lithic bedrock	20-50	Very strongly cemented	None	Moderate	High
Rock outcrop.						
9: Bigfork-----	Lithic bedrock	20-40	Very strongly cemented	None	Moderate	High
Yanush.						
Rock outcrop.						
10: Billstown-----	---	---	---	None	High	High
11: Billstown-----	---	---	---	None	High	High

Soil Survey of Pike County, Arkansas

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		<i>In</i>				
12: Billstown-----	---	---	---	None	High	High
Tiak-----	---	---	---	None	High	High
13: Bonnerdale-----	Paralithic bedrock	40-60	Weakly cemented	None	Moderate	High
14: Carnasaw-----	Paralithic bedrock	40-60	Weakly cemented	None	High	High
Pirum-----	Lithic bedrock	20-50	Very strongly cemented	None	Low	High
15: Carnasaw-----	Paralithic bedrock	40-60	Weakly cemented	None	High	High
Sherless-----	Paralithic bedrock	20-40	Weakly cemented	None	Moderate	Moderate
16: Carnasaw-----	Paralithic bedrock	40-60	Weakly cemented	None	High	High
Sherless-----	Paralithic bedrock	20-40	Weakly cemented	---	---	---
17: Carnasaw-----	Paralithic bedrock	40-60	Weakly cemented	None	High	High
Sherwood-----	Paralithic bedrock	30-60	Weakly cemented	None	Low	Moderate
	Lithic bedrock	30-60	Very strongly cemented			
Zafra-----	Paralithic bedrock	20-40	Weakly cemented	---	Moderate	Moderate
18: Carnasaw-----	Paralithic bedrock	40-60	Weakly cemented	None	High	High
Zafra-----	Paralithic bedrock	20-60	Weakly cemented	None	Moderate	High
Clebit-----	Lithic bedrock	10-20	Very strongly cemented	None	Low	Moderate
19: Ceda-----	---	---	---	None	Low	Moderate
20: Ceda-----	---	---	---	---	Low	Moderate
21: Clebit-----	Lithic bedrock	10-20	Very strongly cemented	None	Low	Moderate

Soil Survey of Pike County, Arkansas

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		<i>In</i>				
21: Carnasaw-----	Paralithic bedrock	40-60	Weakly cemented	None	High	High
Pirum-----	Lithic bedrock	20-50	Very strongly cemented	None	Low	High
22: Cupco-----	---	---	---	None	High	Moderate
23: Dam.						
24: Dela-----	---	---	---	None	Moderate	Moderate
25: Dela-----	---	---	---	None	Moderate	Moderate
26: Delight-----	Paralithic bedrock	20-40	Weakly cemented	None	Moderate	Low
27: Gurdon-----	---	---	---	---	High	High
28: Guyton-----	---	---	---	None	High	Moderate
29: Guyton-----	---	---	---	None	High	Moderate
30: Guyton-----	---	---	---	None	High	Moderate
31: Japany-----	---	---	---	None	High	High
32: Kenn-----	---	---	---	None	Moderate	Moderate
33: Kenn-----	---	---	---	None	Moderate	Moderate
34: Kenn-----	---	---	---	None	Moderate	Moderate
35: Kenn-----	---	---	---	None	Moderate	Moderate
Ceda-----	---	---	---	None	Low	Moderate
36: Kizzia-----	Fragipan	32-40	Noncemented	None	Moderate	High
37: Leeper-----	---	---	---	None	High	Low
38: Littlefir-----	Paralithic bedrock	20-50	Weakly cemented	None	High	High
Carnasaw-----	Paralithic bedrock	40-60	Weakly cemented	None	High	High

Soil Survey of Pike County, Arkansas

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		<i>In</i>				
39: Magnet-----	Paralithic bedrock	20-50	Very weakly cemented	None	Moderate	Low
40: Marietta-----	---	---	---	None	Moderate	Low
41: Mazarn-----	Paralithic bedrock	20-40	Weakly cemented	None	High	High
42: Mazarn-----	Paralithic bedrock	20-40	Weakly cemented	None	High	High
43: McCaskill-----	---	---	---	None	Moderate	High
44: Mena-----	---	---	---	None	Moderate	Moderate
45: Mena-----	---	---	---	None	Moderate	Moderate
46: Mena-----	---	---	---	None	Moderate	Moderate
47: Murfreesboro.						
48: Murfreesboro----	---	---	---	None	Low	Moderate
49: Nathan-----	---	---	---	---	Low	Moderate
50: Nashoba-----	Lithic bedrock	20-40	Very strongly cemented	None	Low	Moderate
Bismarck-----	Paralithic bedrock	10-20	Weakly cemented	None	Moderate	Moderate
Littlefir-----	Paralithic bedrock	20-50	Weakly cemented	---	---	---
51: Nashoba-----	Lithic bedrock	20-40	Very strongly cemented	None	Moderate	Moderate
Bismarck-----	Paralithic bedrock	10-20	Weakly cemented	None	Low	Moderate
Littlefir-----	Paralithic bedrock	20-50	Weakly cemented	None	Moderate	Moderate
52: Nashoba-----	Lithic bedrock	20-40	Very strongly cemented	None	Low	Moderate
Littlefir-----	Paralithic bedrock	20-50	Weakly cemented	---	---	---

Soil Survey of Pike County, Arkansas

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		<i>In</i>				
52: Sherless-----	Paralithic bedrock	20-40	Weakly cemented	None	Moderate	Moderate
53: Neff-----	---	---	---	None	High	Moderate
54: Ochlockonee-----	---	---	---	None	Low	High
55: Ochlockonee-----	---	---	---	None	Low	High
56: Ochlockonee-----	---	---	---	None	Low	High
57: Ouachita-----	---	---	---	None	Moderate	Moderate
58: Ouachita-----	---	---	---	None	Moderate	Moderate
59: Ozan-----	---	---	---	None	High	Moderate
60: Ozan-----	---	---	---	None	High	Moderate
61: Peanutrock-----	---	---	---	None	Low	Moderate
62: Peanutrock.						
63: Peanutrock-----	---	---	---	None	Low	Moderate
64: Peanutrock.						
Tiak-----	---	---	---	None	Low	Moderate
65: Pikecity-----	---	---	---	None	Low	Moderate
66: Pikecreek-----	---	---	---	None	Low	Moderate
67: Pirum-----	Lithic bedrock	20-50	Very strongly cemented	None	Moderate	Moderate
Sherless-----	Paralithic bedrock	20-40	Weakly cemented	None	Moderate	High
Bonnerdale-----	Paralithic bedrock	40-60	Weakly cemented	None	Moderate	High
68: Pits. Udorthents.						

Soil Survey of Pike County, Arkansas

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		<i>In</i>				
69: Riverwash-----	---	---	---	None	Low	Moderate
Ceda-----	---	---	---	None	Low	Moderate
70: Sardis-----	---	---	---	None	High	Moderate
71: Sardis-----	---	---	---	None	High	Moderate
72: Sherless-----	Paralithic bedrock	20-40	Weakly cemented	None	Moderate	Moderate
Littlefir-----	Paralithic bedrock	20-50	Weakly cemented	None	High	High
73: Sherless-----	Paralithic bedrock	20-40	Weakly cemented	None	Moderate	Moderate
Littlefir-----	Paralithic bedrock	20-50	Weakly cemented	None	High	High
Nashoba-----	Lithic bedrock	20-40	Very strongly cemented	---	---	---
74: Sherless-----	Paralithic bedrock	20-40	Weakly cemented	---	---	---
Littlefir-----	Paralithic bedrock	20-50	Weakly cemented	---	---	---
Nashoba-----	Lithic bedrock	20-40	Very strongly cemented	---	---	---
75: Sherless-----	Paralithic bedrock	20-40	Weakly cemented	None	Moderate	Moderate
Nashoba-----	Lithic bedrock	20-40	Very strongly cemented	None	Low	Moderate
76: Smithton-----	---	---	---	None	High	High
77: Speer-----	---	---	---	None	Moderate	Moderate
78: Speer-----	---	---	---	None	Moderate	Moderate
79: Stelltown-----	---	---	---	---	Moderate	High
80: Stelltown-----	---	---	---	---	Moderate	High
81: Tiak-----	---	---	---	None	High	High

Soil Survey of Pike County, Arkansas

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		<i>In</i>				
82: Tiak-----	---	---	---	None	High	High
83: Tiak-----	---	---	---	None	High	High
84: Tiak-----	---	---	---	None	High	High
Antoine-----	---	---	---	None	Moderate	Moderate
85: Tiak-----	---	---	---	None	High	High
Antoine-----	---	---	---	None	Low	Moderate
86: Toine-----	---	---	---	None	Moderate	High
87: Toine-----	---	---	---	None	Moderate	High
88: Una-----	---	---	---	None	High	High
89: Vaughn-----	---	---	---	None	Moderate	Moderate
90: Vaughn-----	---	---	---	None	Moderate	Moderate
Pikecreek-----	---	---	---	None	Low	Moderate
91: Water.						
92: Wetsaw-----	---	---	---	None	Moderate	High
93: Woodall-----	---	---	---	---	High	High
94: Woodall-----	---	---	---	---	High	High
95: Yanush-----	---	---	---	None	Moderate	Moderate
96: Yanush-----	---	---	---	None	Moderate	Moderate
97: Yanush-----	---	---	---	None	Moderate	Moderate
Avant-----	Paralithic bedrock	20-40	Weakly cemented	---	---	---
Bengal-----	Paralithic bedrock	20-40	Weakly cemented	None	Moderate	Moderate
98: Yanush-----	---	---	---	None	Moderate	Moderate

Soil Survey of Pike County, Arkansas

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		<i>In</i>				
98: Avant-----	Paralithic bedrock	20-40	Weakly cemented	---	---	---
Bengal-----	Paralithic bedrock	20-40	Weakly cemented	---	---	---
99: Yanush.						
Bigfork-----	Lithic bedrock	20-50	Very strongly cemented	None	Moderate	High
100: Yanush-----	---	---	---	None	Moderate	Moderate
Bigfork-----	Lithic bedrock	20-50	Very strongly cemented	None	Moderate	High
101: Zafra-----	Paralithic bedrock	20-60	Weakly cemented	None	Moderate	High
Carnasaw-----	Paralithic bedrock	40-60	Weakly cemented	None	High	High
Clebit-----	Lithic bedrock	10-20	Very strongly cemented	None	Low	Moderate

Table 20.--Water Features

[Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of flooding apply to the whole year rather than to individual months. Absence of an entry indicates that a concern or that data were not estimated]

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table			Ponding		
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	
1: Antoine-----	C	Medium	Jan-Apr May-Nov December	1.5-2.5 --- 1.5-2.5	2.0-3.0 --- 2.0-3.0	--- --- ---	---	None None None	
2: Avilla-----	B	Low	Jan-Dec	---	---	---	---	None	
3: Avilla-----	B	Low	Jan-Dec	---	---	---	---	---	
4: Avilla-----	B	Medium	Jan-Dec	---	---	---	---	None	
5: Bengal-----	C	Very high	Jan-Dec	---	---	---	---	None	
Bismarck-----	D	Medium	Jan-Dec	---	---	---	---	None	
Yanush-----	B	Medium	Jan-Dec	---	---	---	---	None	
6: Bengal-----	C	Very high	Jan-Dec	---	---	---	---	None	
Bismarck-----	D	High	Jan-Dec	---	---	---	---	None	
Yanush-----	B	High	Jan-Dec	---	---	---	---	---	

Table 20.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding		
				Upper limit	Lower limit	Surface water depth	Duration	Frequency
7: Bengal-----	C	Very high		Ft	Ft	Ft		
			Jan-Dec	---	---	---	---	None
Bismarck-----	D	High						
			Jan-Dec	---	---	---	---	None
Bigfork-----	C	High						
			Jan-Dec	---	---	---	---	None
8: Bigfork-----	C	Medium						
			Jan-Dec	---	---	---	---	None
Rock outcrop.								
9: Bigfork-----	C	High						
			Jan-Dec	---	---	---	---	None
Yanush-----	B	High						
			Jan-Dec	---	---	---	---	None
Rock outcrop.								
10: Billstown-----	D	High						
			Jan-Dec	---	---	---	---	None
11: Billstown-----	D	Very high						
			Jan-Dec	---	---	---	---	None
12: Billstown-----	D	Very high						
			Jan-Dec	---	---	---	---	None
Tiak-----	C	High						
			Jan-Apr May-Nov December	2.0-4.0	>6.0	---	---	None
				---	---	---	---	None
				2.0-4.0	>6.0	---	---	None

Table 20.--Water Features--Continued

Map symbol and soil name	Hydro- logic igroup	Surface runoff	Month	Water table		Ponding		
				Upper limit	Lower limit	Surface water depth	Duration	Frequency
13: Bonnerdale-----	B	Low		<i>Ft</i>	<i>Ft</i>	<i>Ft</i>		
			Jan-May	0.5-1.0	1.5-2.5	---	---	None
			Jun-Nov	---	---	---	---	None
			December	0.5-1.0	1.5-2.5	---	---	None
14: Carnasaw-----	C	Very high						
			Jan-Dec	---	---	---	---	None
Pirum-----	B	Medium						
			Jan-Dec	---	---	---	---	None
15: Carnasaw-----	C	Very high						
			Jan-Dec	---	---	---	---	None
Sherless-----	B	Medium						
			Jan-Dec	---	---	---	---	None
16: Carnasaw-----	C	Very high						
			Jan-Dec	---	---	---	---	None
Sherless-----	B	Medium						
			Jan-Dec	---	---	---	---	---
17: Carnasaw-----	C	Very high						
			Jan-Dec	---	---	---	---	None
Sherwood-----	C	High						
			Jan-Dec	---	---	---	---	None
Zafra-----	B	High						
			Jan-Dec	---	---	---	---	None
18: Carnasaw-----	C	Very high						
			Jan-Dec	---	---	---	---	None
Zafra-----	B	High						
			Jan-Dec	---	---	---	---	None
Clebit-----	D	Medium						
			Jan-Dec	---	---	---	---	None

Table 20.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding		
				Upper limit	Lower limit	Surface water depth	Duration	Frequency
19: Ceda-----	B	Negligible	Jan-May June Jul-Nov December	Ft	Ft	Ft		
				---	---	---	---	None
				---	---	---	---	None
				---	---	---	---	None
				---	---	---	---	None
20: Ceda-----	B	Negligible	Jan-May June Jul-Nov December	---	---	---	---	None
				---	---	---	---	None
				---	---	---	---	None
				---	---	---	---	None
21: Clebit-----	D	Medium	Jan-Dec	---	---	---	---	None
Carnasaw-----	C	High	Jan-Dec	---	---	---	---	None
Pirum-----	B	Medium	Jan-Dec	---	---	---	---	None
22: Cupco-----	C	Medium	Jan-Apr May Jun-Oct November December	0.5-2.0 0.5-2.0 ---	1.5-2.5 1.5-2.5 ---	---	---	None
				---	---	---	---	None
				---	---	---	---	None
				---	---	---	---	None
23: Dam-----	D	Very high	Jan-Dec	---	---	---	---	---
24: Dela-----	B	Very low	Jan-May June July Aug-Oct November December	3.0-5.0 3.0-5.0 3.0-5.0 ---	>6.0 >6.0 >6.0 >6.0	---	---	None
				---	---	---	---	None
				---	---	---	---	None
				---	---	---	---	None
				---	---	---	---	None

Table 20.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding		
				Upper limit	Lower limit	Surface water depth	Duration	Frequency
25: Dela-----	B	Very low		Ft	Ft			
			Jan-May	3.0-5.0	>6.0	---	---	None
			June	3.0-5.0	>6.0	---	---	None
			July	3.0-5.0	>6.0	---	---	None
			Aug-Oct	---	---	---	---	None
			November	3.0-5.0	>6.0	---	---	None
			December	3.0-5.0	>6.0	---	---	None
26: Delight-----	C	Low						
			Jan-Dec	---	---	---	---	None
27: Gurdon-----	C	Low						
			Jan-Mar	1.0-2.0	>6.0	---	---	None
			April	1.0-2.0	>6.0	---	---	None
			May-Oct	---	---	---	---	None
			November	1.0-2.0	>6.0	---	---	None
			December	1.0-2.0	>6.0	---	---	None
28: Guyton-----	D	Low						
			Jan-May	0.0-1.0	>6.0	---	---	None
			Jun-Nov	---	---	---	---	None
			December	0.0-1.0	>6.0	---	---	None
29: Guyton-----	D	Low						
			Jan-May	0.0-1.0	>6.0	---	---	None
			Jun-Nov	---	---	---	---	None
			December	0.0-1.0	>6.0	---	---	None
30: Guyton-----	D	Low						
			Jan-May	0.0	>6.0	0.0-1.0	Very long	Frequent
			Jun-Nov	0.0	>6.0	---	---	None
			December	0.0	>6.0	0.0-1.0	Very long	Frequent
31: Japany-----	D	Medium						
			Jan-Mar	1.0-1.5	1.5-2.5	---	---	None
			Apr-Dec	---	---	---	---	None

Table 20.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding	
				Upper limit	Lower limit	Surface water depth	Duration Frequency
32: Kenn-----	B	Low	Jan-May Jun-Nov December	---	---	---	None None None
33: Kenn-----	B	Low	Jan-May June Jul-Nov December	---	---	---	None None None None
34: Kenn-----	B	Low	Jan-Apr May June Jul-Oct November December	---	---	---	None None None None None None
35: Kenn-----	B	Low	Jan-May June Jul-Nov December	---	---	---	None None None None
Ceda-----	B	Negligible	Jan-May June Jul-Nov December	---	---	---	None None None None
36: Kizzia-----	C	Low	January Feb-Apr May-Dec	1.3-2.5	2.5-3.6	---	None None None
37: Leeper-----	D	Low	Jan-Mar April May-Nov December	1.0-2.0	>6.0	---	None None None None

Table 20.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding	
				Upper limit	Lower limit	Surface water depth	Duration Frequency
38: Littlefir-----	C	Very high	Jan-Dec	Ft	Ft	Ft	
				---	---	---	None
Carnasaw-----	C	Very high	Jan-Dec	---	---	---	None
39: Magnet-----	C	High	Jan-Dec	---	---	---	None
40: Marietta-----	C	Negligible	Jan-Mar April May-Nov December	1.5-2.0 --- --- ---	>6.0 --- --- ---	---	None None None None
41: Mazarn-----	C	Medium	Jan-May Jun-Nov December	1.0-2.0 --- 1.0-2.0	2.5-3.4 --- 2.5-3.4	---	None None None
42: Mazarn-----	C	Medium	Jan-May Jun-Nov December	1.0-2.0 --- 1.0-2.0	2.5-3.4 --- 2.5-3.4	---	None None None
43: McCaskill-----	C	Low	Jan-Apr May Jun-Oct November December	1.0-1.5 --- --- --- ---	1.5-2.5 --- --- --- ---	---	None None None None None
44: Mena-----	C	Medium	Jan-Apr May-Nov December	2.0-3.0 --- 2.0-3.0	2.5-3.5 --- 2.5-3.5	---	None None None

Table 20.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding	
				Upper limit	Lower limit	Surface water depth	Duration Frequency
45: Mena-----	C	High	Jan-Apr May-Nov December	2.0-3.0 --- 2.0-3.0	2.5-3.5 --- 2.5-3.5	---	None None None
46: Mena-----	C	Medium	Jan-Apr May-Nov December	2.0-3.0 --- 2.0-3.0	2.5-3.5 --- 2.5-3.5	---	None None None
47: Murfreesboro-----	B	Low	Jan-Dec	---	---	---	None
48: Murfreesboro-----	B	Low	Jan-Dec	---	---	---	None
49: Nathan-----	B	Medium	January Feb-Apr May-Dec	1.3-2.5 --- ---	2.5-3.6 --- ---	---	None None None
50: Nashoba-----	C	Low	Jan-Dec	---	---	---	None
Bismarck-----	D	Low	Jan-Dec	---	---	---	None
Littlefir-----	B	Very high	Jan-Dec	---	---	---	---
51: Nashoba-----	D	Low	Jan-Dec	---	---	---	None
Bismarck-----	C	Medium	Jan-Dec	---	---	---	None
Littlefir-----	B	High	Jan-Dec	---	---	---	None

Table 20.--Water Features---Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding		
				Upper limit	Lower limit	Surface water depth	Duration	Frequency
52: Nashoba-----	C	Medium	Jan-Dec	---	---	---	---	None
Littlefir-----	C	High	Jan-Dec	---	---	---	---	---
Sherless-----	B	High	Jan-Dec	---	---	---	---	None
53: Neff-----	C	Medium	Jan-May June Jul-Oct November December	0.5-2.5 0.5-2.5 --- 0.5-2.5 0.5-2.5	1.0-3.0 1.0-3.0 --- 1.0-3.0 1.0-3.0	--- --- --- --- ---	--- --- --- --- ---	None None None None None
54: Ochlockonee-----	B	Very low	Jan-Apr May Jun-Oct November December	3.0-5.0 --- --- --- 3.0-5.0	>6.0 --- --- --- >6.0	--- --- --- --- ---	--- --- --- --- ---	None None None None None
55: Ochlockonee-----	B	Very low	Jan-Apr May Jun-Oct November December	3.0-5.0 --- --- --- 3.0-5.0	>6.0 --- --- --- >6.0	--- --- --- --- ---	--- --- --- --- ---	None None None None None
56: Ochlockonee-----	B	Very low	Jan-Apr May June Jul-Oct November December	---	---	---	---	None
			May	---	---	---	---	None
			June	---	---	---	---	None
			Jul-Oct	---	---	---	---	None
			November	---	---	---	---	None
			December	---	---	---	---	None

Table 20.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding	
				Upper limit	Lower limit	Surface water depth	Duration Frequency
57: Ouachita-----	C	Low	Jan-Apr May Jun-Oct November December	Ft --- --- --- ---	Ft --- --- --- ---	Ft ---	None None None None None
58: Ouachita-----	C	Low	Jan-May June Jul-Oct November December	--- --- --- --- ---	--- --- --- --- ---	---	None None None None None
59: Ozan-----	D	Medium	Jan-Apr May Jun-Oct November December	1.0-2.5 1.0-2.5 --- --- 1.0-2.5	>6.0 >6.0 --- --- >6.0	---	None None None None None
60: Ozan-----	D	Low	Jan-Apr May June Jul-Oct November December	1.0-2.5 1.0-2.5 --- --- --- 1.0-2.5	>6.0 >6.0 --- --- --- >6.0	---	None None None None None None
61: Peanutrock-----	B	Low	Jan-Dec	---	---	---	None
62: Peanutrock-----	B	Medium	Jan-Dec	---	---	---	None
63: Peanutrock-----	B	High	Jan-Dec	---	---	---	None

Table 20.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding	
				Upper limit	Lower limit	Surface water depth	Duration Frequency
64: Peanutrock-----	B	Medium	Jan-Dec	---	---	---	None
Tiak-----	B	Very high	Jan-Dec	---	---	---	None
65: Pikecity-----	B	Low	Jan-Dec	---	---	---	None
66: Pikecreek-----	B	Negligible	Jan-Apr May June Jul-Oct November December	---	---	---	None None None None None None
67: Pirum-----	B	Medium	Jan-Dec	---	---	---	---
Sherless-----	B	Medium	Jan-May Jun-Nov December	0.5-1.0 --- 0.5-1.0	1.5-2.5 --- 1.5-2.5	---	None None None
Bonnerdale-----	B	Medium	Jan-May Jun-Nov December	0.5-1.0 --- 0.5-1.0	1.5-2.5 --- 1.5-2.5	---	None None None
68: Pits.							
Udorthents-----	A	---	Jan-Dec	---	---	---	None

Table 20.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding		
				Upper limit	Lower limit	Surface water depth	Duration	Frequency
69: Riverwash-----	B	Negligible		Ft	Ft	Ft		
			Jan-May	---	---	---	---	None
			June	---	---	---	---	None
			Jul-Oct	---	---	---	---	None
			November	---	---	---	---	None
Ceda-----	B	Negligible	December	---	---	---	---	None
			Jan-May	---	---	---	---	None
			June	---	---	---	---	None
			Jul-Oct	---	---	---	---	None
70: Sardis-----	C	Low	November	---	---	---	---	None
			December	---	---	---	---	None
			Jan-Apr	1.5-3.0	>6.0	---	---	None
			May	1.5-3.0	>6.0	---	---	None
71: Sardis-----	C	Low	Jun-Nov	---	---	---	---	None
			December	---	---	---	---	None
			Jan-Apr	1.5-3.0	>6.0	---	---	None
			May	1.5-3.0	>6.0	---	---	None
72: Sherless-----	B	Medium	Jun-Oct	---	---	---	---	None
			November	---	---	---	---	None
			December	---	---	---	---	None
			Jan-Dec	---	---	---	---	None
73: Sherless-----	B	Medium	Jan-Dec	---	---	---	---	None
			Jan-Dec	---	---	---	---	None
			Jan-Dec	---	---	---	---	None
Littlefir-----	C	Very high						
Nashoba-----	C	Low						

Table 20.--Water Features---Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding	
				Upper limit	Lower limit	Surface water depth	Duration Frequency
74: Sherless-----	B	High	Jan-Dec	---	---	Ft	---
Littlefir-----	C	High	Jan-Dec	---	---	---	---
Nashoba-----	C	Medium	Jan-Dec	---	---	---	---
75: Sherless-----	B	High	Jan-Dec	---	---	---	None
Nashoba-----	C	Medium	Jan-Dec	---	---	---	None
76: Smithton-----	D	Low	Jan-May Jun-Nov December	0.0-1.0 --- 0.0-1.0	>6.0 --- >6.0	---	None None None
77: Speer-----	B	Low	Jan-May June Jul-Nov December	---	---	---	None None None None
78: Speer-----	B	Low	Jan-Apr May-Nov December	---	---	---	None None None
79: Stelltown-----	C	Low	Jan-Mar Apr-Oct Nov-Dec	2.0-3.0 --- 2.0-3.0	>6.0 --- >6.0	---	None None None

Table 20.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding		
				Upper limit	Lower limit	Surface water depth	Duration	Frequency
80: Stelltown-----	C	Medium		Ft	Ft	Ft		
			Jan-Mar	2.0-3.0	>6.0	---	---	None
			Apr-Oct	---	---	---	---	None
			Nov-Dec	2.0-3.0	>6.0	---	---	None
81: Tiak-----	C	High						
			Jan-Apr	2.0-4.0	>6.0	---	---	None
			May-Nov	---	---	---	---	None
			December	2.0-4.0	>6.0	---	---	None
82: Tiak-----	C	Medium						
			Jan-Apr	2.0-4.0	>6.0	---	---	None
			May-Nov	---	---	---	---	None
			December	2.0-4.0	>6.0	---	---	None
83: Tiak-----	C	Very high						
			Jan-Apr	2.0-4.0	>6.0	---	---	None
			May-Nov	---	---	---	---	None
			December	2.0-4.0	>6.0	---	---	None
84: Tiak-----	C	Medium						
			Jan-Apr	2.0-4.0	>6.0	---	---	None
			May-Nov	---	---	---	---	None
			December	2.0-4.0	>6.0	---	---	None
Antoine-----	B	Medium						
			Jan-Dec	---	---	---	---	None
85: Tiak-----	C	Very high						
			Jan-Apr	2.0-4.0	>6.0	---	---	None
			May-Nov	---	---	---	---	None
			December	2.0-4.0	>6.0	---	---	None
Antoine-----	B	Medium						
			Jan-Dec	---	---	---	---	None

Table 20.--Water Features---Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding	
				Upper limit	Lower limit	Surface water depth	Duration Frequency
86: Toine-----	B	Very low	Jan-Apr May Jun-Oct November December	Ft --- --- --- --- ---	Ft --- --- --- --- ---	Ft --- --- --- --- ---	 None None None None None
87: Toine-----	B	Very low	Jan-Apr May Jun-Oct November December	--- --- --- --- ---	--- --- --- --- ---	--- --- --- --- ---	None None None None None
88: Una-----	D	Low	Jan-Mar April May-Oct November December	0.5-1.0 0.5-1.0 --- 0.5-1.0 0.5-1.0	>6.0 >6.0 --- >6.0 >6.0	--- --- --- --- ---	None None None None None
89: Vaughn-----	B	Low	Jan-May June Jul-Oct November December	--- --- --- --- ---	--- --- --- --- ---	--- --- --- --- ---	None None None None None
90: Vaughn-----	B	Low	Jan-Apr May-Jun July Aug-Oct November December	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	None None None None None None

Table 20.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding	
				Upper limit	Lower limit	Surface water depth	Duration Frequency
90: Pikecreek-----	B	Negligible		Ft	Ft	Ft	
			Jan-Apr	---	---	---	None
			May-Jun	---	---	---	None
			July	---	---	---	None
			Aug-Oct	---	---	---	None
			November	---	---	---	None
			December	---	---	---	None
91: Water.							
92: Wetsaw-----	C	High					
			Jan-May	1.5-2.5	>6.0	---	None
			Jun-Oct	---	---	---	None
			Nov-Dec	1.5-2.5	>6.0	---	None
93: Woodall-----	D	Very low					
			Jan-May	0.0-1.0	>6.0	---	None
			June	---	---	---	None
			Jul-Oct	---	---	---	None
			November	---	---	---	None
			December	0.0-1.0	>6.0	---	None
94: Woodall-----	D	Low					
			Jan-Apr	0.0-1.0	>6.0	---	None
			May	0.0-1.0	>6.0	---	None
			Jun-Nov	---	---	---	None
			December	0.0-1.0	>6.0	---	None
95: Yanush-----	B	Medium					
			Jan-Dec	---	---	---	None
96: Yanush-----	B	Medium					
			Jan-Dec	---	---	---	None
97: Yanush-----	B	High					
			Jan-Dec	---	---	---	None

Table 20.--Water Features---Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table		Ponding	
				Upper limit	Lower limit	Surface water depth	Duration Frequency
97: Avant-----	B	High	Jan-Dec	Ft	Ft	Ft	---
Bengal-----	B	Very high	Jan-Dec	---	---	---	None
98: Yanush-----	B	High	Jan-Dec	---	---	---	None
Avant-----	B	Medium	Jan-Dec	---	---	---	None
Bengal-----	C	Very high	Jan-Dec	---	---	---	---
99: Yanush-----	B	Very high	Jan-Dec	---	---	---	---
Bigfork-----	C	High	Jan-Dec	---	---	---	None
100: Yanush-----	B	High	Jan-Dec	---	---	---	None
Bigfork-----	C	High	Jan-Dec	---	---	---	None
101: Zafra-----	B	High	Jan-Dec	---	---	---	None
Carnasaw-----	C	Very high	Jan-Dec	---	---	---	None
Clebit-----	D	Medium	Jan-Dec	---	---	---	None

Soil Survey of Pike County, Arkansas

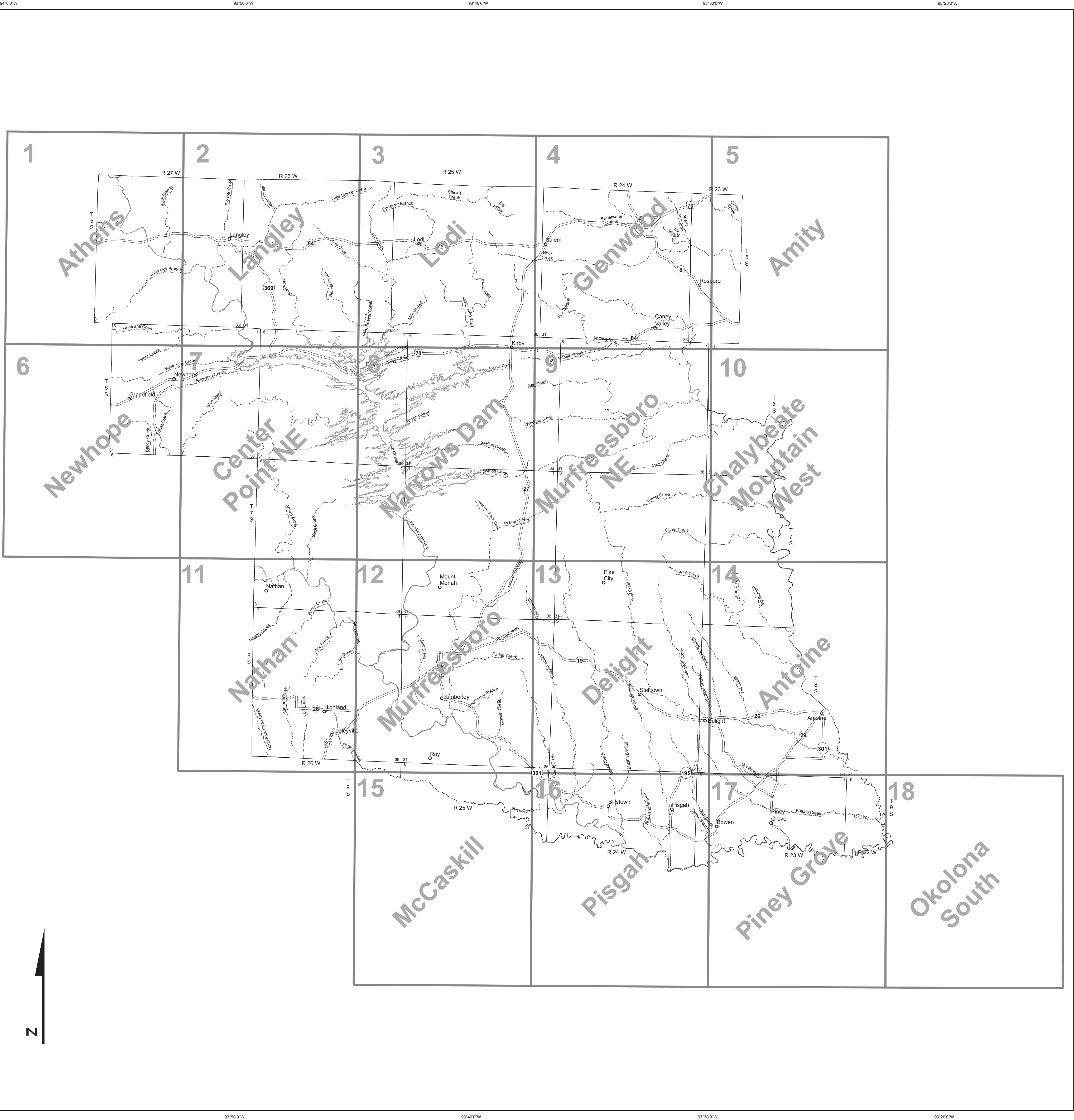
Table 21.--Taxonomic Classification of the Soils

[An asterisk in the first column indicates a taxadjunct to the series. See text for a description of those characteristics that are outside the range of the series]

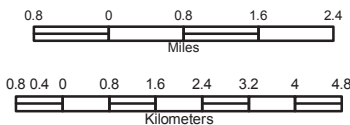
Soil name	Family or higher taxonomic class
Antoine-----	Fine-silty, mixed, semiactive, thermic Aquic Paleudults
Avant-----	Loamy-skeletal, siliceous, semiactive, thermic Typic Hapludults
Avilla-----	Fine-loamy, siliceous, semiactive, thermic Typic Paleudults
Bengal-----	Fine, mixed, semiactive, thermic Typic Hapludults
Bigfork-----	Loamy-skeletal, siliceous, semiactive, thermic Typic Hapludults
Billstown-----	Very-fine, smectitic, thermic Chromic Dystruderts
Bismarck-----	Loamy-skeletal, mixed, semiactive, thermic, shallow Typic Dystrudepts
Bonnerdale-----	Coarse-loamy, siliceous, semiactive, thermic Aquic Hapludults
Carnasaw-----	Fine, mixed, semiactive, thermic Typic Hapludults
Ceda-----	Loamy-skeletal, siliceous, semiactive, nonacid, thermic Typic Udifluvents
Clebit-----	Loamy-skeletal, siliceous, semiactive, thermic Lithic Dystrudepts
Cupco-----	Fine-silty, siliceous, active, thermic Typic Epiaqualfs
Dela-----	Coarse-loamy, siliceous, active, nonacid, thermic Typic Udifluvents
Delight-----	Fine, smectitic, thermic Aquic Hapluderts
Gurdon-----	Coarse-silty, siliceous, semiactive, thermic Aquic Paleudults
Guyton-----	Fine-silty, siliceous, active, thermic Typic Glossaqualfs
Japany-----	Fine, smectitic, thermic Vertic Hapludalfs
Kenn-----	Fine-loamy, siliceous, active, thermic Ultic Hapludalfs
Kizzia-----	Fine-loamy, siliceous, semiactive, thermic Typic Fragiudults
Leeper-----	Fine, smectitic, nonacid, thermic Vertic Haplaquepts
Littlefir-----	Fine, mixed, semiactive, thermic Oxyaquic Hapludults
*Magnet-----	Fine, mixed, active, thermic Ultic Hapludalfs
Marietta-----	Fine-loamy, siliceous, active, thermic Fluvaquentic Eutrudepts
Mazarn-----	Fine-loamy, siliceous, semiactive, thermic Aquic Hapludults
McCaskill-----	Coarse-loamy, mixed, semiactive, thermic Aquic Paleudults
Mena-----	Fine, mixed, semiactive, thermic Aquic Paleudults
Murfreesboro-----	Fine-loamy, siliceous, semiactive, thermic Typic Hapludults
Nashoba-----	Loamy-skeletal, siliceous, semiactive, thermic Typic Dystrudepts
Nathan-----	Fine-silty, siliceous, subactive, thermic Typic Hapludults
Neff-----	Fine-silty, siliceous, active, thermic Aquultic Hapludalfs
Ochlockonee-----	Coarse-loamy, siliceous, active, acid, thermic Typic Udifluvents
Ouachita-----	Fine-silty, siliceous, active, thermic Fluventic Dystrudepts
Ozan-----	Coarse-loamy, siliceous, subactive, thermic Typic Glossaqualfs
Peanutrock-----	Loamy-skeletal, siliceous, semiactive, thermic Typic Hapludults
Pikecity-----	Fine-loamy, siliceous, semiactive, thermic Typic Hapludults
Pikecreek-----	Sandy-skeletal, siliceous, thermic Typic Udifluvents
Pirum-----	Fine-loamy, siliceous, semiactive, thermic Typic Hapludults
Riverwash-----	Siliceous Udorthents
Sardis-----	Fine-silty, siliceous, active, thermic Fluvaquentic Dystrochrepts
Sherless-----	Fine-loamy, siliceous, semiactive, thermic Typic Hapludults
Sherwood-----	Fine-loamy, mixed, semiactive, thermic Typic Hapludults
Smithton-----	Coarse-loamy, siliceous, semiactive, thermic Typic Paleaqualts
Speer-----	Fine-loamy, siliceous, active, thermic Ultic Hapludalfs
Stelltown-----	Coarse-loamy, siliceous, semiactive, thermic Aquic Paleudults
Tiak-----	Fine, mixed, active, thermic Aquic Hapludults
Toine-----	Fine-loamy, mixed, active, thermic Ultic Hapludalfs
Udorthents-----	Orthents
Una-----	Fine, mixed, active, acid, thermic Typic Epiaquepts
Vaughn-----	Coarse-loamy, siliceous, semiactive, thermic Typic Hapludalfs
Wetsaw-----	Fine-loamy, siliceous, semiactive, thermic Aquic Paleudalfs
Woodall-----	Coarse-loamy, siliceous, active, thermic Typic Endoaqualfs
Yanush-----	Loamy-skeletal, siliceous, active, thermic Typic Paleudalfs
Zafra-----	Loamy-skeletal, siliceous, semiactive, thermic Typic Hapludults

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INDEX TO MAP SHEETS
PIKE COUNTY, ARKANSAS



Scale = 1:130000

SOIL LEGEND

SYMBOL	NAME
1	Antoine loam, 1 to 6 percent slopes
2	Avilla fine sandy loam, 1 to 6 percent slopes
3	Avilla gravelly fine sandy loam, 1 to 6 percent slopes
4	Avilla gravelly fine sandy loam, 6 to 12 percent slopes
5	Bengal-Bismarck-Yanush complex, 8 to 15 percent slopes
6	Bengal-Bismarck-Yanush complex, 15 to 35 percent slopes, extremely stony
7	Bengal-Bismarck-Bigfork complex, 35 to 60 percent slopes, extremely stony
8	Bigfork-Rock outcrop complex, 3 to 15 percent slopes, very rubbly
9	Bigfork-Yanush-Rock outcrop complex, 35 to 60 percent slopes, rubbly
10	Billstown loam, 3 to 8 percent slopes
11	Billstown loam, 8 to 15 percent slopes
12	Billstown-Tiak complex, 8 to 15 percent slopes
13	Bonnerdale fine sandy loam, 3 to 8 percent slopes
14	Carnasaw-Pirum complex, 3 to 15 percent slopes, rubbly
15	Carnasaw-Sherless complex, 8 to 15 percent slopes
16	Carnasaw-Sherless complex, 15 to 35 percent slopes, extremely stony
17	Carnasaw-Sherwood-Zafra complex, 35 to 60 percent slopes, extremely stony
18	Carnasaw-Zafra-Clebit complex, 15 to 35 percent slopes, rubbly
19	Ceda very cobbly fine sandy loam, 0 to 3 percent slopes, frequently flooded
20	Ceda very gravelly loam, 0 to 3 percent slopes, frequently flooded
21	Clebit-Carnasaw-Pirum complex, 3 to 15 percent slopes, rubbly
22	Cupco silt loam, 0 to 2 percent slopes, rarely flooded
23	Dam
24	Dela fine sandy loam, 0 to 2 percent slopes, occasionally flooded
25	Dela fine sandy loam, 0 to 2 percent slopes, frequently flooded
26	Delight silty clay, 3 to 8 percent slopes
27	Gurdon fine sandy loam, 0 to 2 percent slopes, occasionally flooded
28	Guyton silt loam, 0 to 2 percent slopes, rarely flooded
29	Guyton silt loam, 0 to 2 percent slopes, occasionally flooded
30	Guyton silt loam, 0 to 1 percent slopes, ponded
31	Japany silty clay loam, 1 to 5 percent slopes
32	Kenn fine sandy loam, 0 to 2 percent slopes, rarely flooded
33	Kenn fine sandy loam, 0 to 3 percent slopes, occasionally flooded
34	Kenn very fine sandy loam, 0 to 2 percent slopes, frequently flooded
35	Kenn-Ceda complex, 0 to 3 percent slopes, frequently flooded
36	Kizzia silt loam, 3 to 8 percent slopes
37	Leeper silty clay loam, 0 to 2 percent slopes, occasionally flooded
38	Littlefir-Carnasaw complex, 1 to 8 percent slopes
39	Magnet variant cobbly silt loam, 15 to 35 percent slopes
40	Marietta loam, 0 to 2 percent slopes, occasionally flooded
41	Mazam silt loam, 0 to 3 percent slopes
42	Mazam silt loam, 0 to 3 percent slopes, occasionally flooded
43	McCaskill fine sandy loam, 0 to 2 percent slopes
44	Mena gravelly silt loam, 1 to 6 percent slopes
45	Mena gravelly silt loam, 6 to 12 percent slopes
46	Mena silt loam, 1 to 6 percent slopes
47	Murfreesboro gravelly loam, 1 to 6 percent slopes
48	Murfreesboro loam, 1 to 6 percent slopes
49	Nathan fine sandy loam, 3 to 8 percent slopes
50	Nashoba-Bismarck-Littlefir complex, 1 to 8 percent slopes
51	Nashoba-Bismarck-Littlefir complex, 8 to 15 percent slopes
52	Nashoba-Littlefir-Sherless complex, 15 to 35 percent slopes, rubbly
53	Neff loam, 0 to 2 percent slopes, occasionally flooded
54	Ochlockonee fine sandy loam, 0 to 2 percent slopes, rarely flooded
55	Ochlockonee fine sandy loam, 0 to 2 percent slopes, occasionally flooded
56	Ochlockonee fine sandy loam, 0 to 2 percent slopes, frequently flooded
57	Ouachita silt loam, 0 to 3 percent slopes, rarely flooded
58	Ouachita silt loam, 0 to 2 percent slopes, occasionally flooded
59	Ozan fine sandy loam, 0 to 2 percent slopes, rarely flooded
60	Ozan fine sandy loam, 0 to 2 percent slopes, occasionally flooded
61	Peanutrock very gravelly fine sandy loam, 3 to 8 percent slopes
62	Peanutrock very gravelly fine sandy loam, 8 to 15 percent slopes
63	Peanutrock very gravelly fine sandy loam, 15 to 35 percent slopes
64	Peanutrock-Tiak complex, 8 to 15 percent slopes
65	Pikecity silt loam, 1 to 8 percent slopes
66	Pikecreek gravelly loamy sand, 0 to 3 percent slopes, frequently flooded
67	Pirum-Sherless-Bonnerdale complex, 1 to 8 percent slopes
68	Pits and Udorthents association, 3 to 35 percent slopes
69	Riverwash-Ceda complex, 0 to 3 percent slopes, frequently flooded
70	Sardis silt loam, 0 to 2 percent slopes, rarely flooded
71	Sardis silt loam, 0 to 2 percent slopes, occasionally flooded
72	Sherless-Littlefir complex, 1 to 8 percent slopes
73	Sherless-Littlefir-Nashoba complex, 8 to 15 percent slopes
74	Sherless-Littlefir-Nashoba complex, 15 to 35 percent slopes
75	Sherless-Nashoba complex, 3 to 8 percent slopes, extremely stony
76	Smithton fine sandy loam, 0 to 2 percent slopes
77	Speer fine sandy loam, 0 to 2 percent slopes, occasionally flooded
78	Speer fine sandy loam, 0 to 2 percent slopes, rarely flooded
79	Stelltown sandy loam, 1 to 6 percent slopes
80	Stelltown sandy loam, 6 to 12 percent slopes
81	Tiak very fine sandy loam, 1 to 8 percent slopes
82	Tiak gravelly very fine sandy loam, 1 to 8 percent slopes
83	Tiak gravelly very fine sandy loam, 8 to 15 percent slopes
84	Tiak-Antoine complex, 1 to 8 percent slopes
85	Tiak-Antoine complex, 8 to 15 percent slopes
86	Toine fine sandy loam, 0 to 2 percent slopes, rarely flooded
87	Toine fine sandy loam, 0 to 2 percent slopes, occasionally flooded
88	Una silty clay loam, 0 to 2 percent slopes, occasionally flooded
89	Vaughn gravelly loamy sand, 0 to 3 percent slopes, occasionally flooded
90	Vaughn-Pikecreek complex, 0 to 3 percent slopes, frequently flooded
91	Water
92	Wetsaw fine sandy loam, 1 to 6 percent slopes
93	Woodall fine sandy loam, 0 to 2 percent slopes, occasionally flooded
94	Woodall fine sandy loam, 0 to 2 percent slopes, frequently flooded
95	Yanush very gravelly silt loam, 1 to 8 percent slopes
96	Yanush very gravelly silt loam, 8 to 15 percent slopes
97	Yanush-Avant-Bengal complex, 15 to 35 percent slopes
98	Yanush-Avant-Bengal complex, 35 to 60 percent slopes
99	Yanush-Bigfork complex, 15 to 35 percent slopes, extremely stony
100	Yanush-Bigfork complex, 35 to 60 percent slopes, rubbly
101	Zafra-Carnasaw-Clebit complex, 35 to 60 percent slopes, rubbly

CONVENTIONAL AND SPECIAL
SYMBOLS LEGEND

CULTURAL FEATURES

BOUNDARIES

County or parish

Reservation (national forest or park,
state forest or park)

Field sheet matchline and neatline

OTHER BOUNDARY

Airport, airfield

Cemetery

City/county park

STATE COORDINATE TICK
1 890 000 FEET

LAND DIVISION CORNER
(section and land grants)

GEOGRAPHIC COORDINATE TICK

TRANSPORTATION

Divided roads

Other roads

ROAD EMBLEMS AND DESIGNATIONS

Interstate

Federal

State

HYDROGRAPHIC FEATURES

STREAMS

Perennial stream, double line

Unclassified

Drainage end (indicates direction
of flow)

SMALL LAKES, PONDS, AND RESERVOIRS

Perennial water

Miscellaneous water

SPECIAL SYMBOLS FOR SOIL
SURVEY AND SSURGO

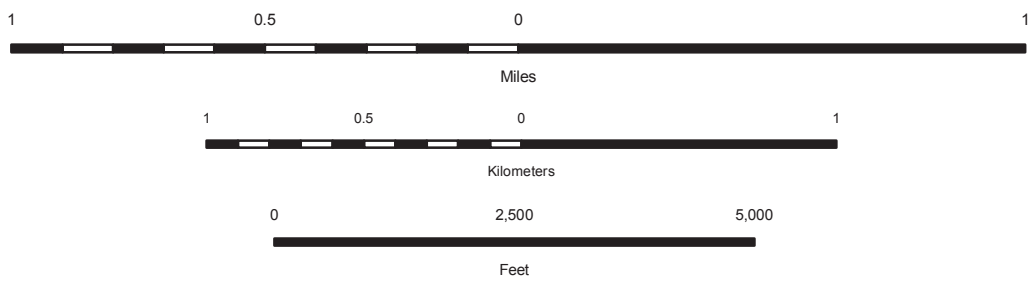
SOIL DELINEATIONS AND SYMBOLS

AdB AmB

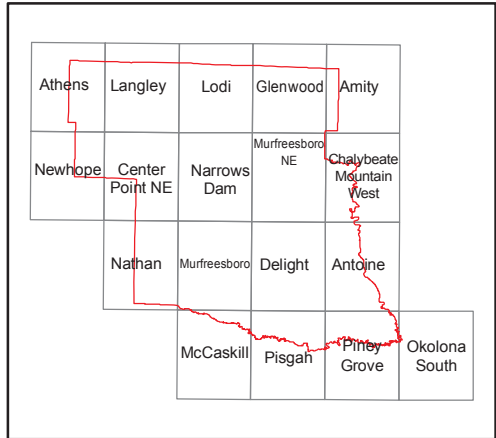


This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1996 aerial photography. Public Land Survey (PLSS) and hydrography were acquired from the Natural Resources Conservation Service. PLSS and hydrography were edited to conform with features represented on the publication orthophotography and to enhance the clarity of the soils information.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



SCALE 1:24000



PIKE COUNTY, ARKANSAS

SHEET 1 OF 18

93°50'0"W

93°47'30"W

34°22'30"N

34°22'30"N

34°20'0"N

34°20'0"N

34°17'30"N

34°17'30"N

34°15'0"N

34°15'0"N

Joins Sheet 1, Athens

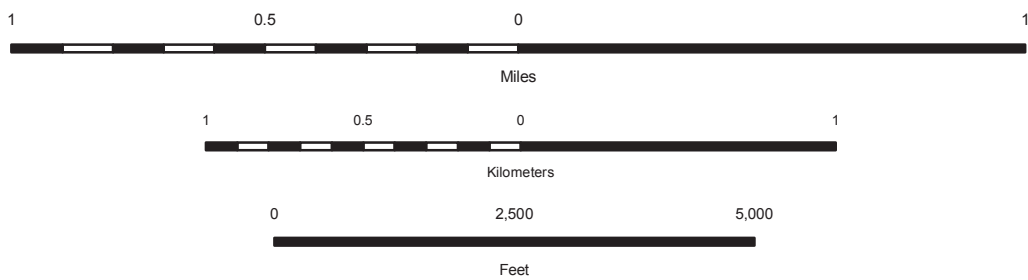
Joins Sheet 3, Lodi

Joins Sheet 6, New Hope

Joins Sheet 8, Narrows Dam

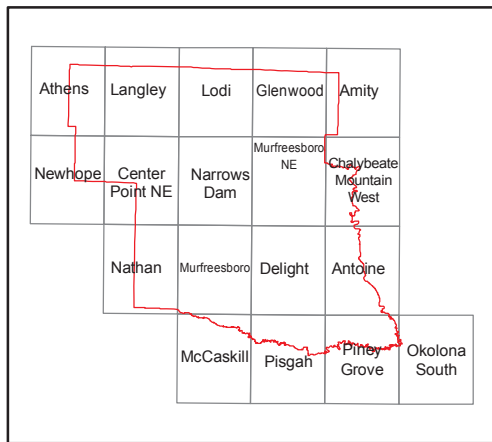
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North American Datum of 1983 (NAD83) GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 15.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



Joins Sheet 7, Center Point NE

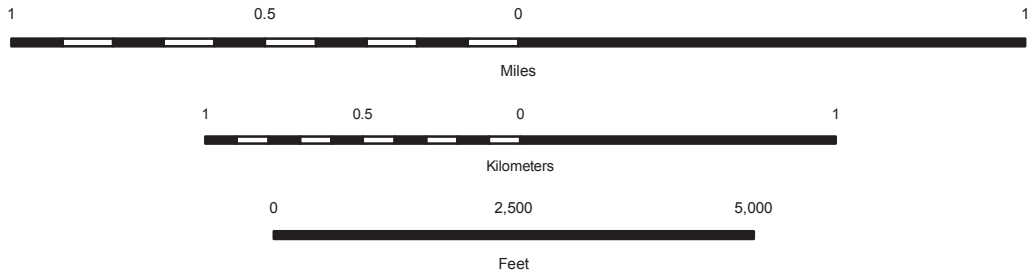
93°47'30"W



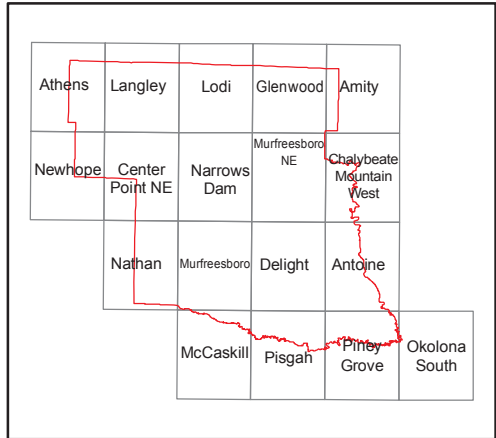


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North American Datum of 1983 (NAD83). GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 15
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



SCALE 1:24000



PIKE COUNTY, ARKANSAS
SHEET 3 OF 18

93°35'0"W

93°32'30"W

34°22'30"N

34°22'30"N

34°20'0"N

34°20'0"N

34°17'30"N

34°17'30"N

34°15'0"N

34°15'0"N

93°37'30"W

93°35'0"W

Joins Sheet 9, Murfreesboro NE

93°32'30"W

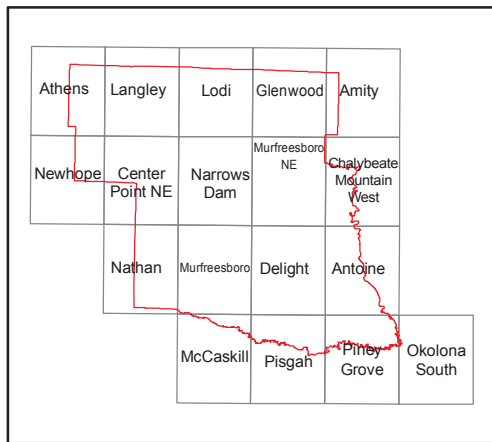
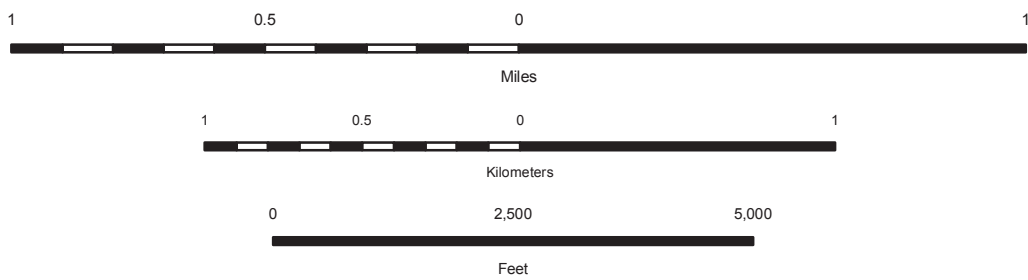
93°30'0"W

Joins Sheet 10, Cheyenne Mountain West

Joins Sheet 8, Narrows Dam

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1996 aerial photography. Public Land Survey (PLSS) and hydrography were acquired from the Natural Resources Conservation Service. PLSS and hydrography were edited to conform with features represented on the publication orthophotography and to enhance the clarity of the soils information.

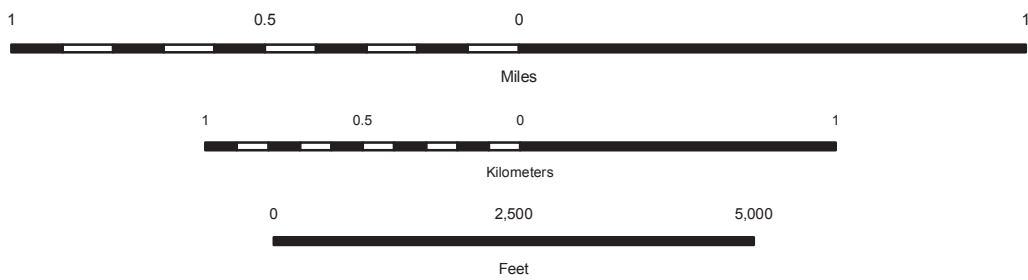
North American Datum of 1983 (NAD83) GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 15.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



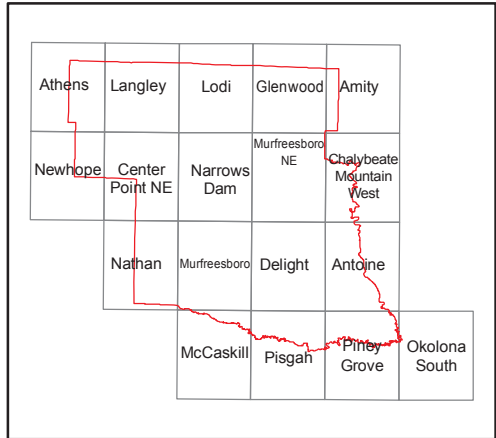


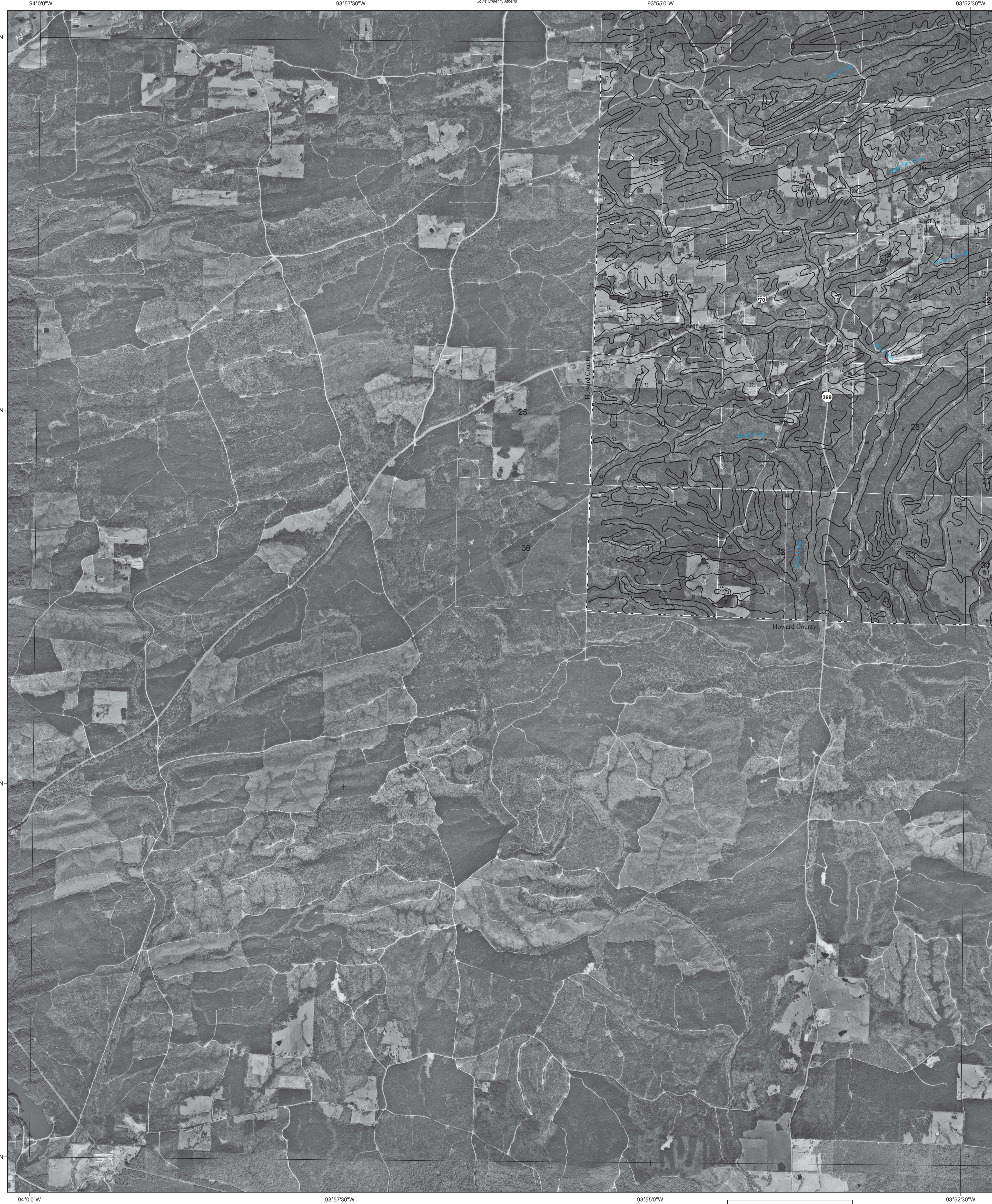
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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



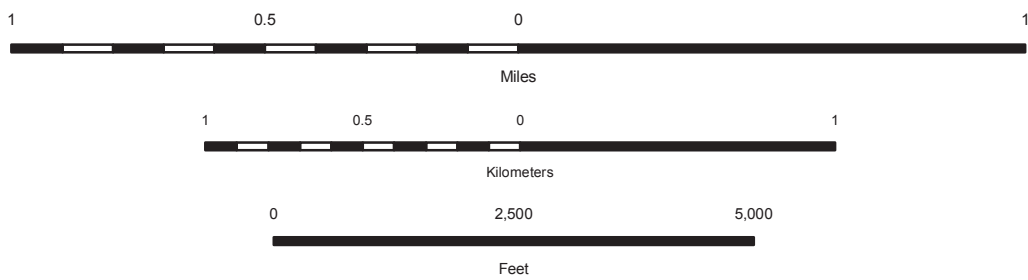
SCALE 1:24000



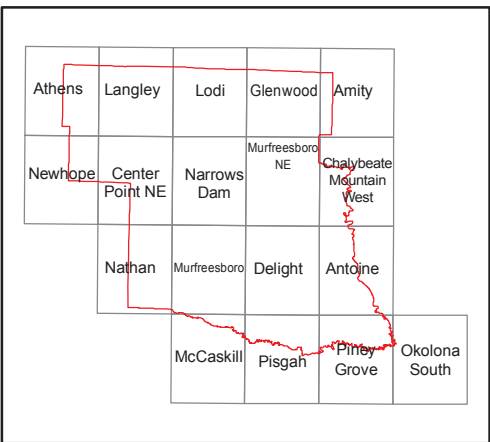


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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



SCALE 1:24000



Joins Sheet 1, Athens

93°50'0"W

Joins Sheet 2, Langley

93°47'30"W

Joins Sheet 3, Lodi

34°15'0"N

34°15'0"N

34°12'30"N

34°12'30"N

34°10'0"N

34°10'0"N

34°7'30"N

34°7'30"N

Joins Sheet 6, Newhope

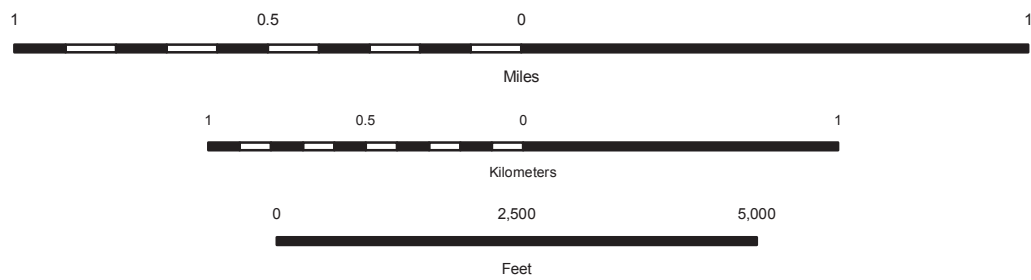
Joins Sheet 8, Narrows Dam

Howard County

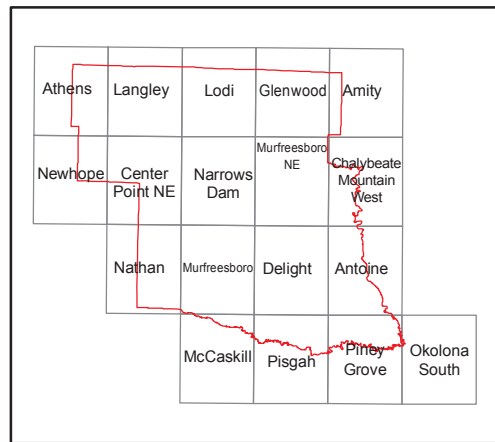
Joins Sheet 12, Murfreesboro

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1996 aerial photography. Public Land Survey (PLSS) and hydrography were acquired from the Natural Resources Conservation Service. PLSS and hydrography were edited to conform with features represented on the publication orthophotography and to enhance the clarity of the soils information.

North American Datum of 1983 (NAD83) GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 15.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



SCALE 1:24000



93°42'30"W

Joins Sheet 3, Lodi

93°40'0"W

34°15'0"N

34°15'0"N

34°12'30"N

34°12'30"N

34°10'0"N

34°10'0"N

34°7'30"N

34°7'30"N

93°45'0"W

93°42'30"W

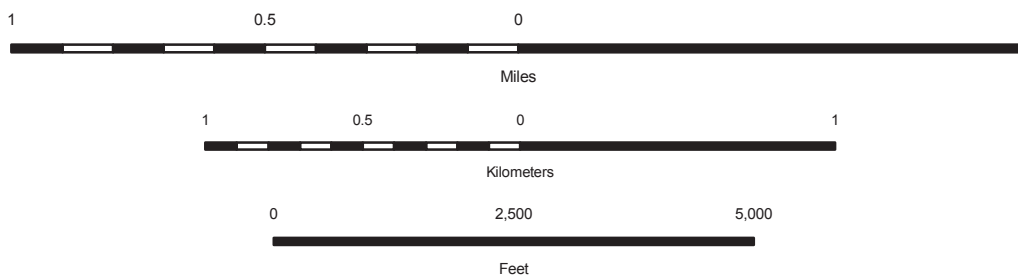
93°40'0"W

93°37'30"W

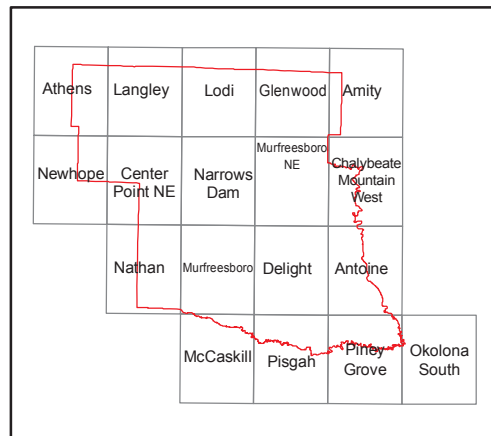
Joins Sheet 12, Murfreesboro

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North American Datum of 1983 (NAD83). GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 15.
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SCALE 1:24000

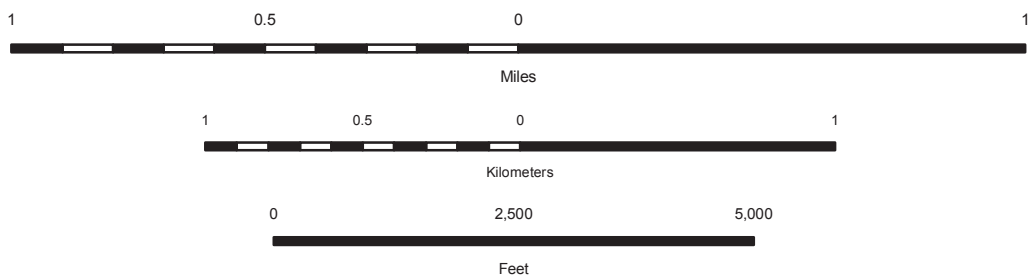


PIKE COUNTY, ARKANSAS

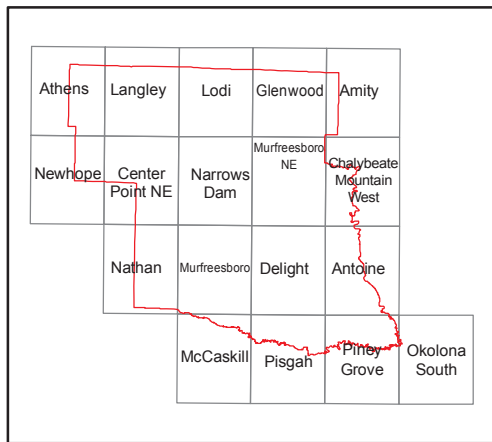
SHEET 8 OF 18

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SCALE 1:24000



PIKE COUNTY, ARKANSAS

SHEET 9 OF 18

Join Sheet 4, Glenwood

34°15'0"N

34°15'0"N

34°12'30"N

34°12'30"N

34°10'0"N

34°10'0"N

34°7'30"N

34°7'30"N

93°30'0"W

93°27'30"W

Join Sheet 14, Antoine

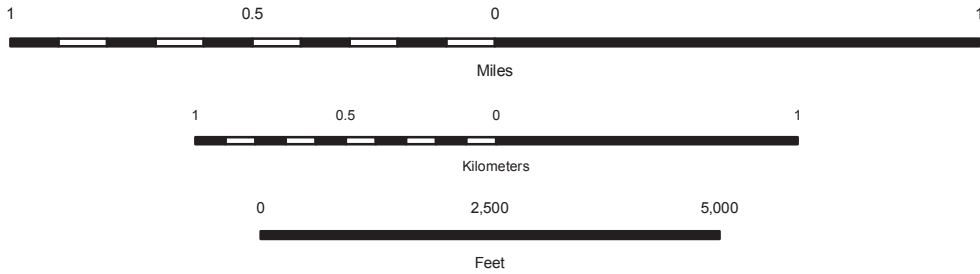
93°25'0"W

93°22'30"W

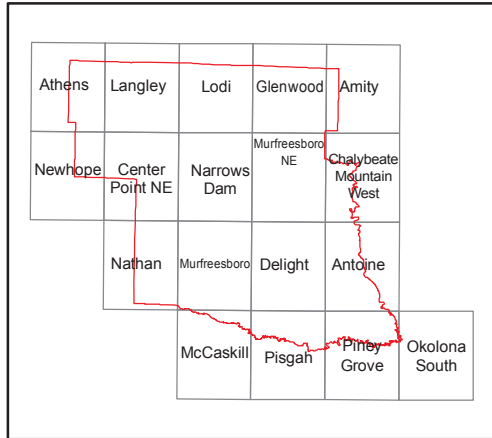
Join Sheet 13, DeGray

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North American Datum of 1983 (NAD83) GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



SCALE 1:24000



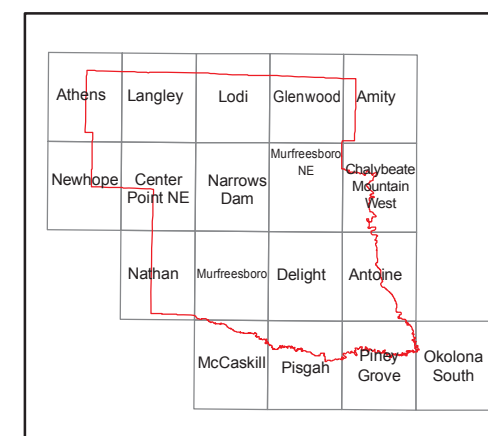
PIKE COUNTY, ARKANSAS

SHEET 10 OF 18



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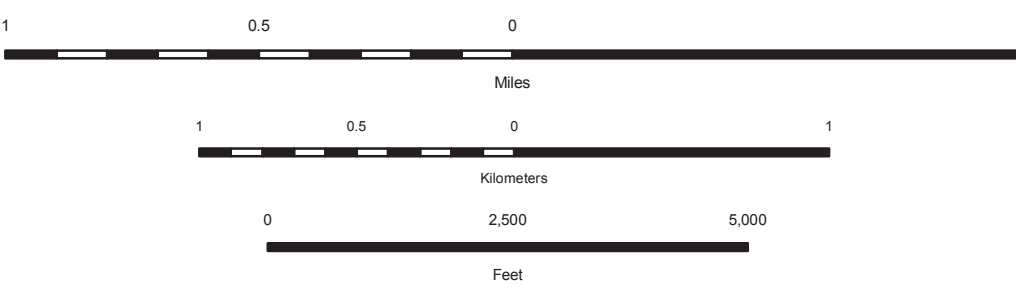
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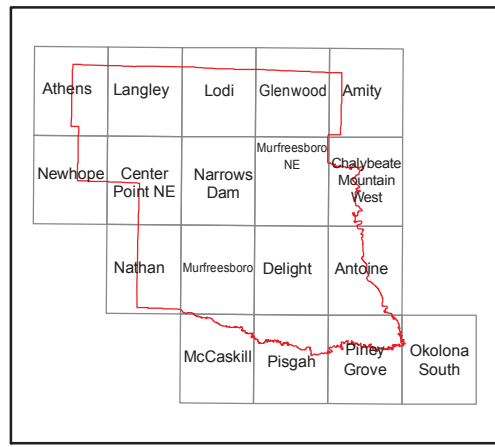


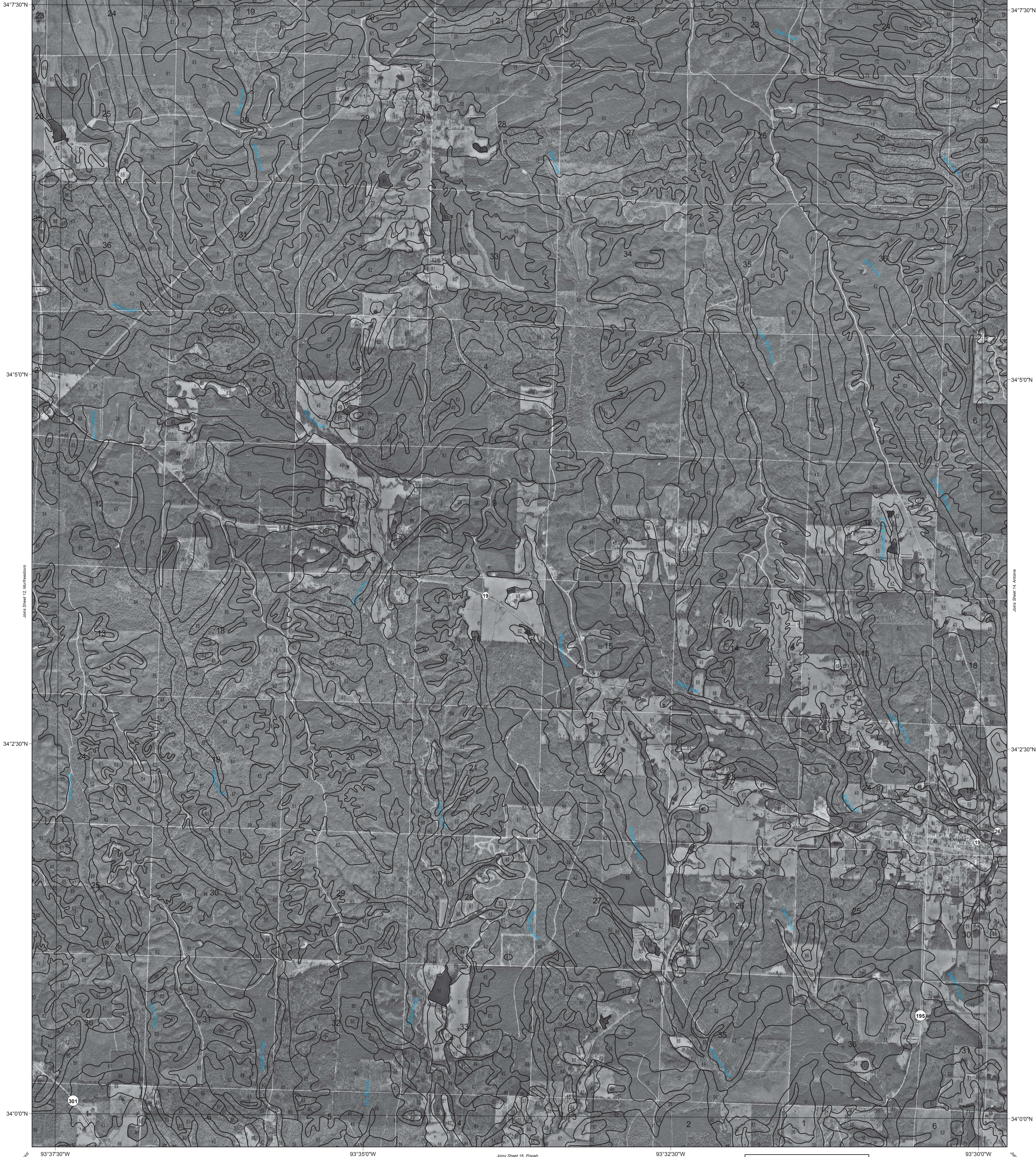
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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



SCALE 1:24000

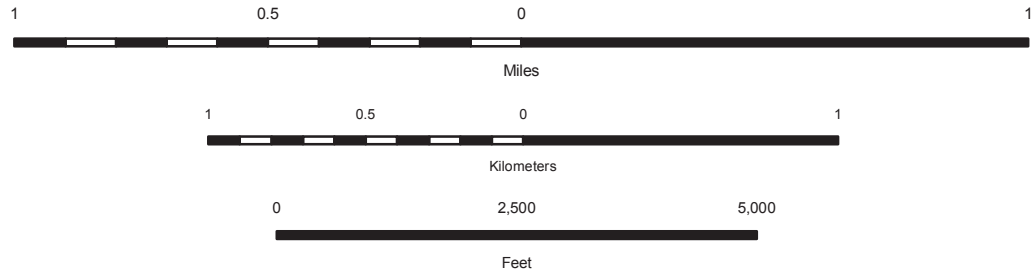




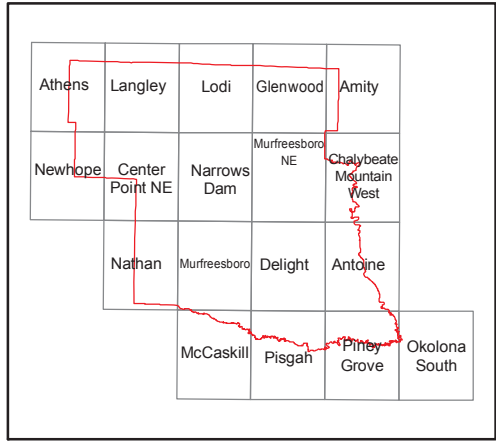


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North American Datum of 1983 (NAD83) GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 15.
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SCALE 1:24000



Join Sheet 11, Homer

Join Sheet 13, Pigeon

93°42'30"W

Join Sheet 12, Murfreesboro

93°40'0"W

34°0'0"N

34°0'0"N

33°57'30"N

33°57'30"N

33°55'0"N

33°55'0"N

33°52'30"N

33°52'30"N

93°45'0"W

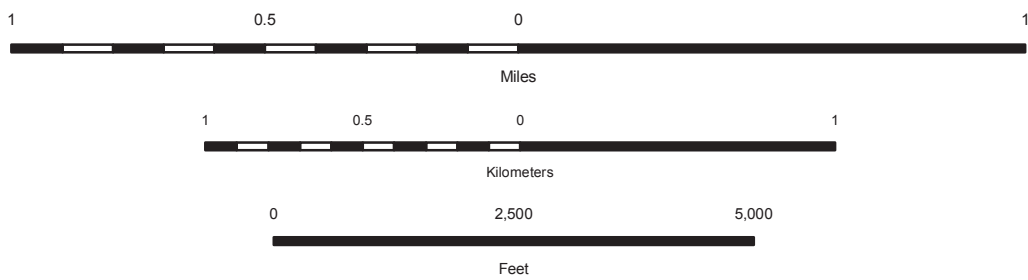
93°42'30"W

93°40'0"W

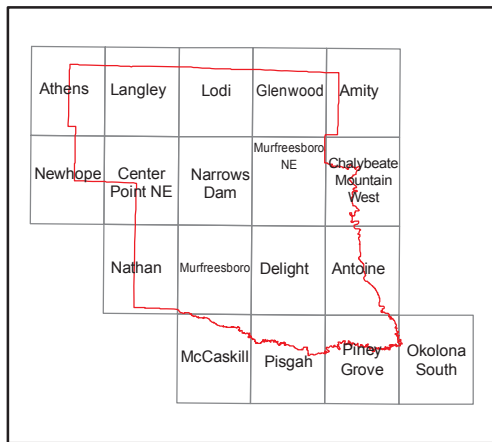
93°37'30"W

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



SCALE 1:24000



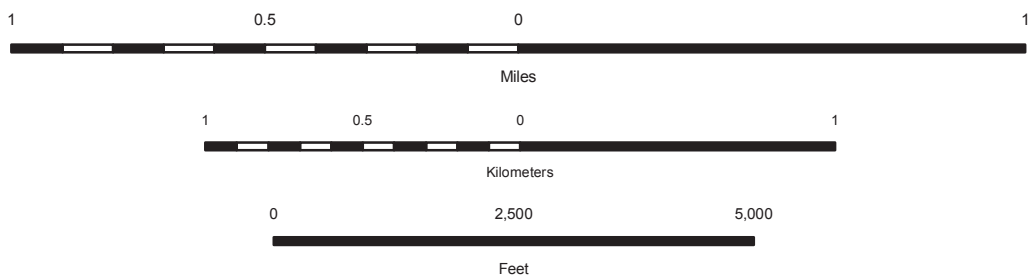
PIKE COUNTY, ARKANSAS

SHEET 15 OF 18

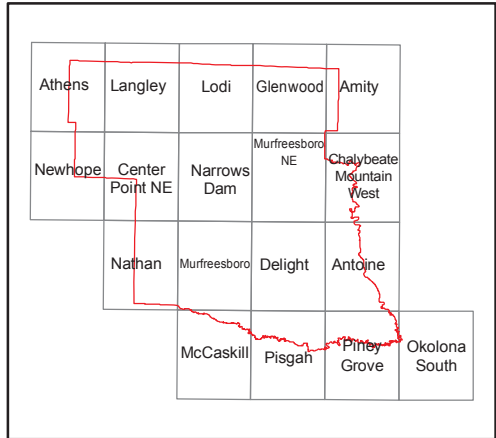


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SCALE 1:24000



93°27'30"W

Joins Sheet 14, Antoine

93°25'0"W

34°0'0"N

34°0'0"N

33°57'30"N

33°57'30"N

33°55'0"N

33°55'0"N

33°52'30"N

33°52'30"N

93°30'0"W

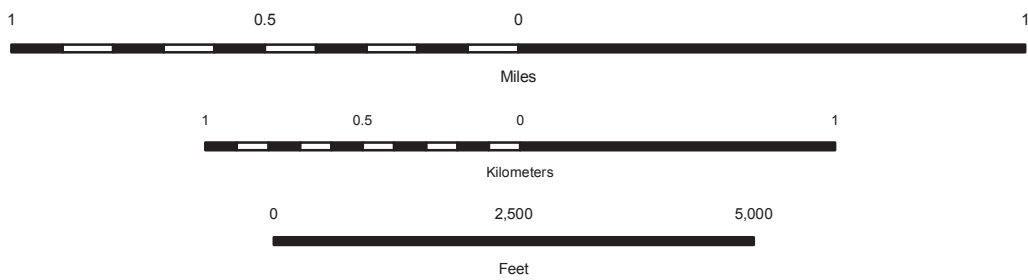
93°27'30"W

93°25'0"W

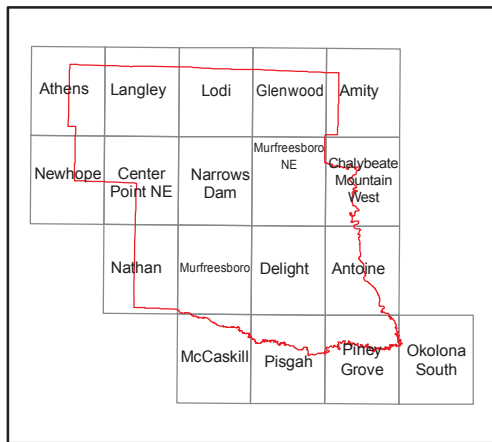
93°22'30"W

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SCALE 1:24000



PIKE COUNTY, ARKANSAS

SHEET 17 OF 18

Join Sheet 14, Abbeys

93°20'0"W

93°17'30"W

34°0'0"N

34°0'0"N

33°57'30"N

33°57'30"N

33°55'0"N

33°55'0"N

33°52'30"N

33°52'30"N

93°22'30"W

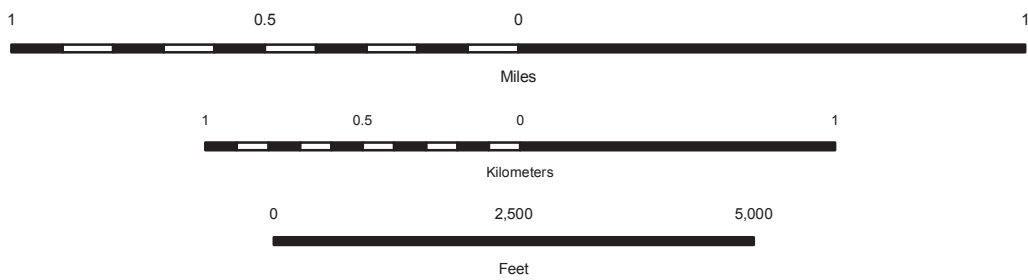
93°20'0"W

93°17'30"W

93°15'0"W

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



SCALE 1:24000

